AD0105109C2

Service Manual

Tuner/Amplifier

SA-EH670

Colour

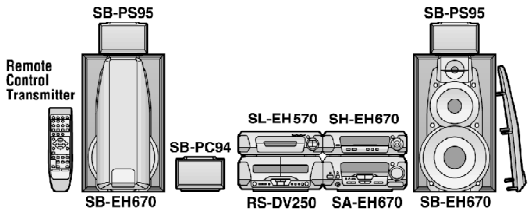
(S).....Silver Type

Areas

(E).....Europe.

(EG).....Germany, Italy, France, Netherlands and Denmark.

(EP).....East Europe.



SPECIFICATIONS

Because of unique interconnecting cables, when a component requires service, send or bring in the entire system.

System	SC-EH670
Sound Processor	SH-EH670
Tuner/Amplifier	**SA-EH670**
CD Player	SL-EH570
Cassette Deck	RS-DV250
Front Speakers*	SB-EH670
Center Speaker*	SB-PC94
Surround Speakers*	SB-PS95

* : Made in Spain.

Specifications

Amplifier section

Power output (L/R both channel driven):
Stereo mode;
DIN 1 kHz, THD 1 %; 2 × 60 W (6 Ω)
RMS 1 kHz, THD 10 %; 2 × 80 W (6 Ω)
PRO LOGIC mode;
DIN FRONT 1 kHz, THD 1 %; 2 × 60 W (6 Ω)
SURROUND 1 kHz, THD 1 %; 2 × 15 W (8 Ω)
CENTER 1 kHz, THD 1 %; 30 W (8 Ω)
RMS FRONT 1 kHz, THD 10 %; 2 × 80W (6 Ω)
SURROUND 1 kHz, THD 10%; 2 × 20 W (8 Ω)
CENTER 1 kHz, THD 10 %; 40 W (8 Ω)
Total harmonic distortion:
Rated power at 1 kHz; 1 % (6 Ω)
Half power at 1 kHz; 0.1 % (6 Ω)
Load impedance:
FRONT; 6 Ω
SURROUND; 8 Ω
CENTER; 8 Ω

FM tuner section

Frequency range: 87.50 – 108.00 MHz (0.05 MHz steps)
Sensitivity: 1.8 µV (IHF usable)
S/N 26 dB: 1.5 µV
S/N (MONO): 70 dB (75 dB, IHF)
Antenna terminal(s): 75 Ω (unbalanced)

AM tuner section

Frequency range: 522 – 1629 kHz (9 kHz steps)
520 – 1630 kHz (10 kHz steps)
Sensitivity (S/N 20 dB): 500 µV/m

Timer section

Clock: Quartz - lock type
Function: Play timer (1 time, daily),
Rec timer (1 time, daily),
Sleep (120 min, 30 min intervals)
Setting intervals (Play/Rec): 1 minute – 23 hours 59 minutes
(1 min intervals)

General

Power supply: AC 230 V, 50 Hz
Power consumption: 170 W
Standby; 0.5 W
Dimensions (W×H×D): 293×118.5×343 mm
Mass: 5.2 kg

Notes: Specifications are subject to change without notice.
Mass and dimensions are approximate.
Total harmonic distortion is measured by the digital spectrum analyzer.

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Technics®

1. Before Repairs

1. Turn off the power supply. Using a 10 Ω, 10 W resistor, connect both ends of power supply capacitors (C701, C703 and C702, C704) in order to discharge the voltage.
2. Before turning the power supply on, after completion of repair, slowly apply the primary voltage by using a power supply voltage controller to make sure that the consumed current at 50 Hz in NO SIGNAL mode should be shown below with respectto supply voltage 230 V.

Power supply voltage	AC 230 V
Consumed current 50 Hz	70 ~ 300 mA

2. Protection Circuitry

The protection circuitry may have operated if either of the following conditions is noticed:

- No sound is heard when the power is switched ON.

- Sound stops during a performance.

The functions of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are shorted, or if speaker systems with an impedance less than the indicated rated impedance of this unit are used.
If this occurs, follow the procedures outlined below.

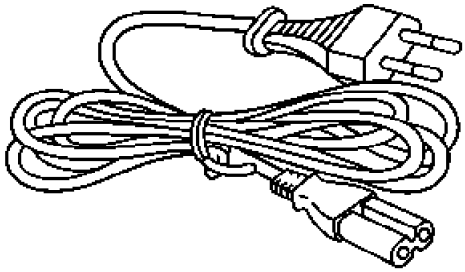
1. Switch OFF the power.
2. Determine the cause of the problem and correct it.
3. Switch ON the power once again.

Note:

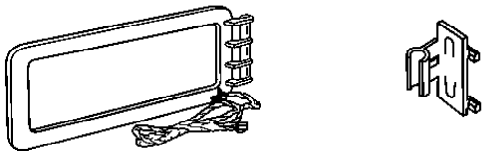
When the protection circuitry functions, the unit will not operate unless the power is first switched OFF and then ON again.

3. Accessories

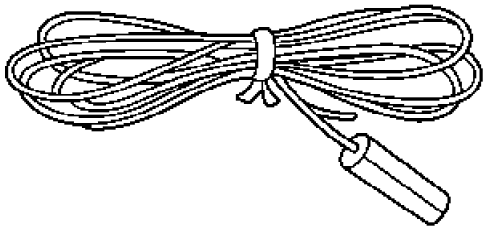
- AC power supply cord / (RJA0019-1X).....1 pc.



- AM loop antenna set / (RSA0022-L).....1 pc.

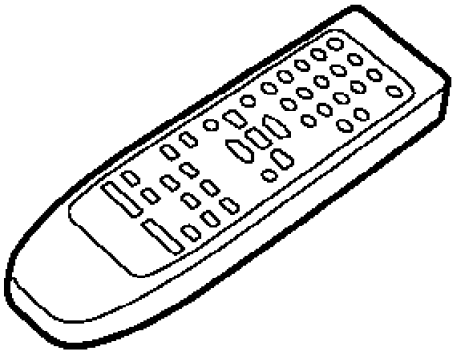


- FM indoor antenna / (RSA0007).....1 pc.

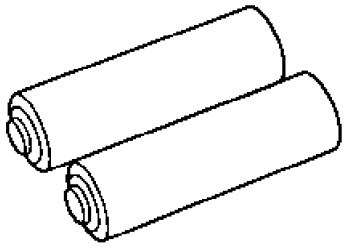


- Speaker cords / (REE1057).....2 pcs.

- Remote control transmitter / (EUR7702170).....1 pc.



- Remote control batteries / (R6/LR6, “AA”, UM-3).....2 pcs.
Note: These are available on sales route.



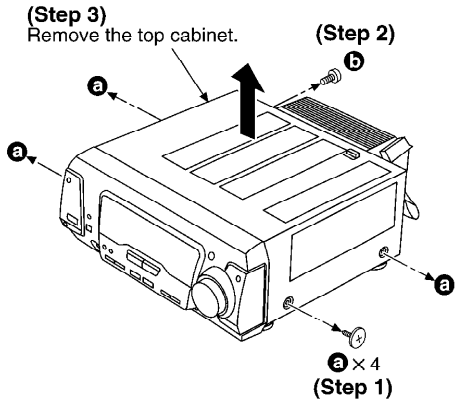
4. Location of Controls

5. Operation Checks and Component Replacement / Procedures

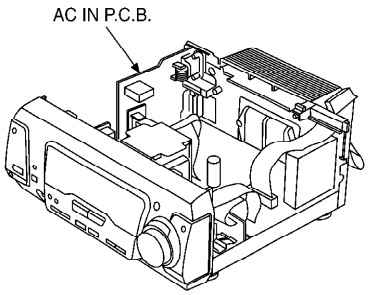
- This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.

- For reassembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.

5.1. Checking for the AC IN P.C.B.

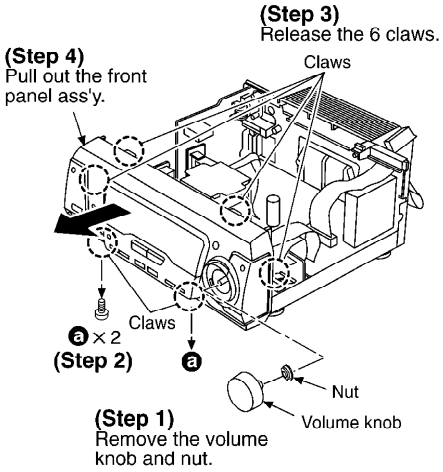


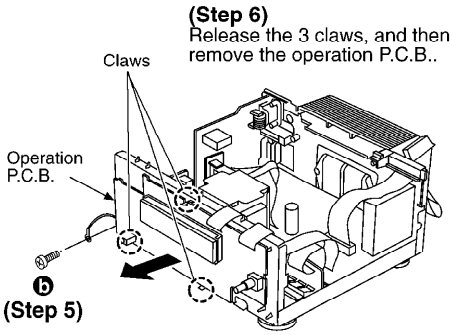
- Check the AC IN P.C.B. as shown below.



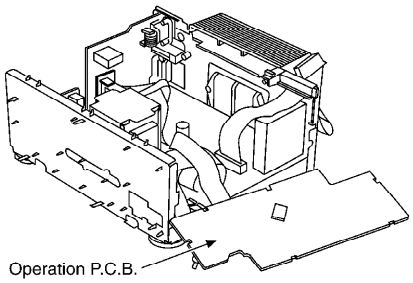
5.2. Checking for the operation P.C.B.

- Follow the (Step 1) - (Step 3) of item 5.1.



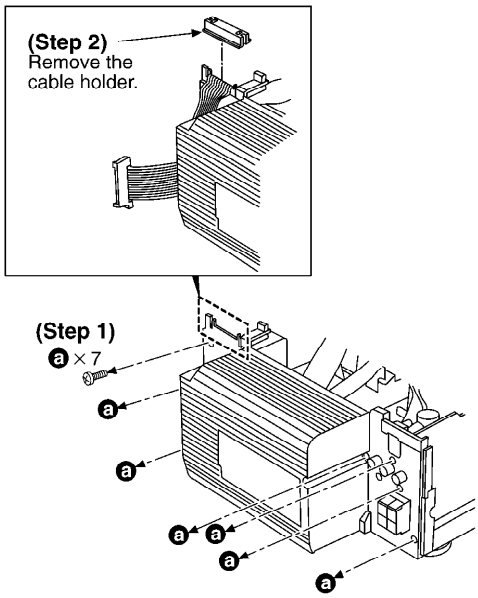


- Check the operation P.C.B. as shown below.

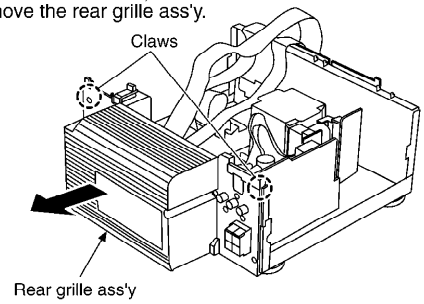


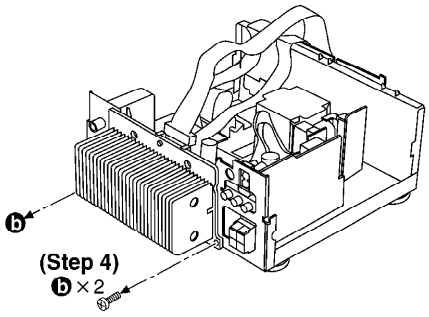
5.3. Checking for the main P.C.B.

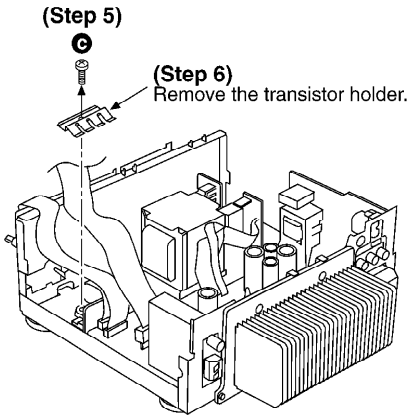
- Follow the (Step 1) - (Step 3) of item 5.1.
- Follow the (Step 1) - (Step 6) of item 5.2.

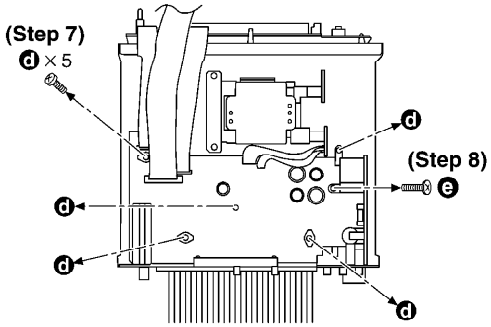


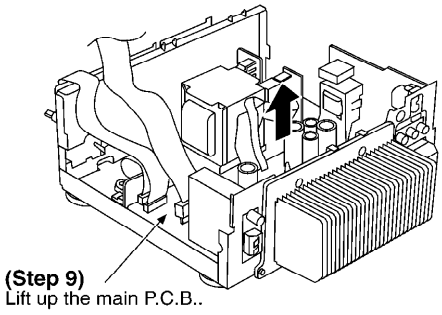
(Step 3)
Release the 2 claws, and then remove the rear grille ass'y.



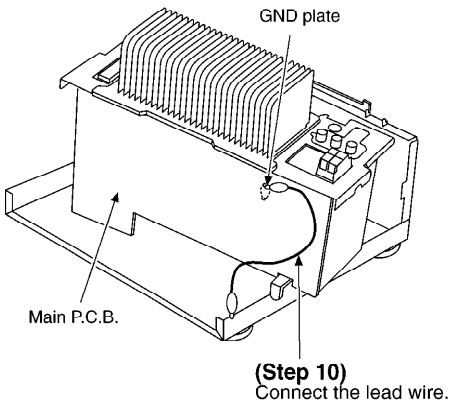






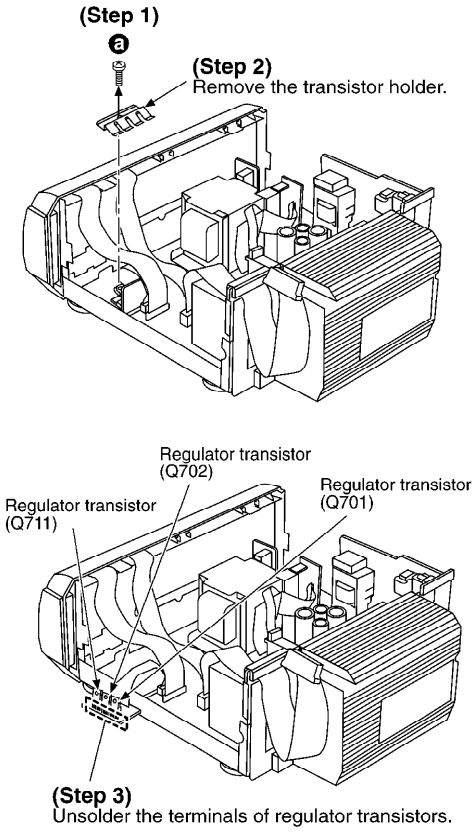


- Check the main P.C.B. as shown below.



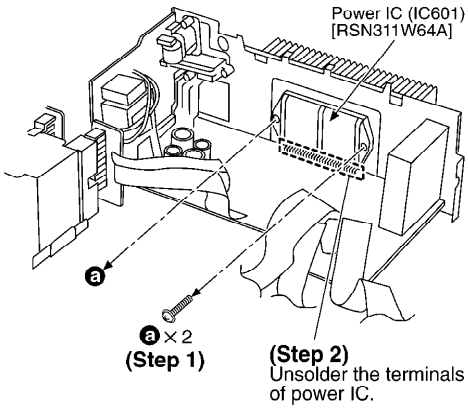
5.4. Replacement for the regulator transistor

- Follow the (Step 1) - (Step 3) of item 5.1.



5.5. Replacement for the power IC

- Follow the (Step 1) - (Step 3) of item 5.1.
- Follow the (Step 1) - (Step 6) of item 5.2.
- Follow the (Step 1) - (Step 10) of item 5.3.

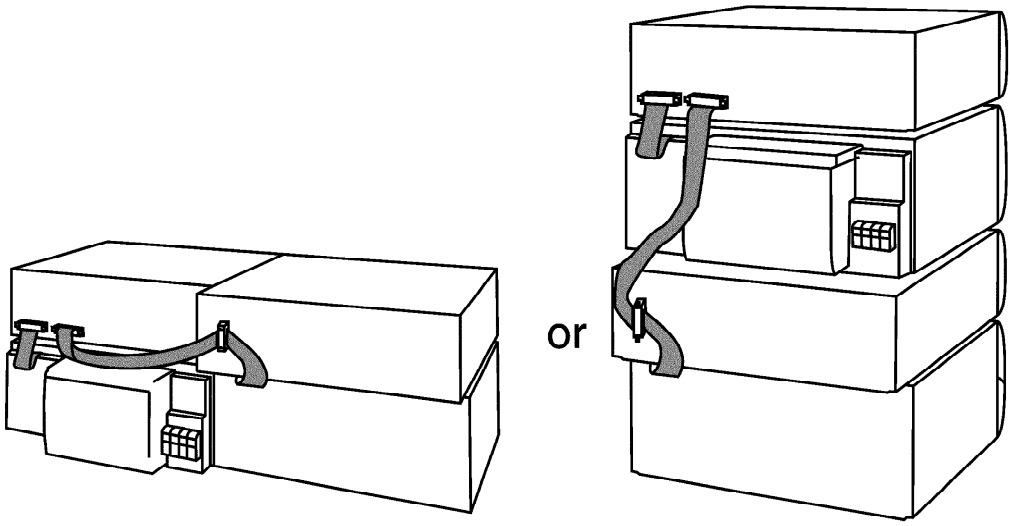


NOTE:
When mounting the power IC apply silicone conpound (RFKX0002) to the rear side of power IC.

6. To Supply Power Source

This unit SA-EH670 is designed to operate on power supplied from system connected. / For system connection, refer to Fig. 6-1.

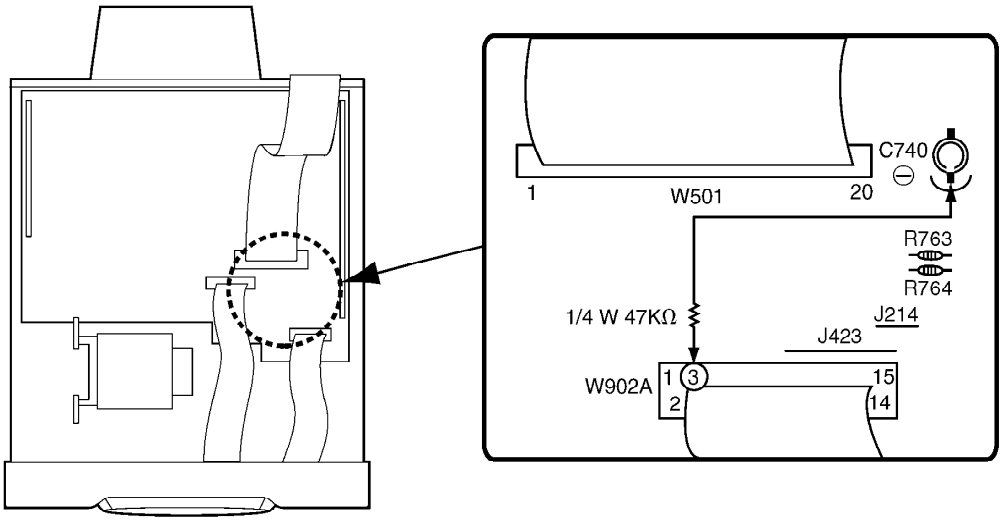
Fig. 6-1.



When the unit SA-EH670 has to test and service alone, use the following method to supply power source.

1. **Short the section between W902A Pin 3 and C740 (-) (GND). (Refer to Fig. 6-2.)**
2. **Connect this unit to an AC power supply cord. / (This unit come to stand-by mode.)**
3. **Turn the unit ON.**

Fig. 6-2.



Notes:

Use only this method when checking the voltage.. / In case of checking the operations, use the system connections to supply power source.

7. Self-Diagnostic Function

This unit is equipped with a self-diagnostic function which, in the event of a malfunction, automatically displays a code indicating the nature of the malfunction.
Use this self-diagnostic function when servicing the unit.

7.1. To display the malfunction code

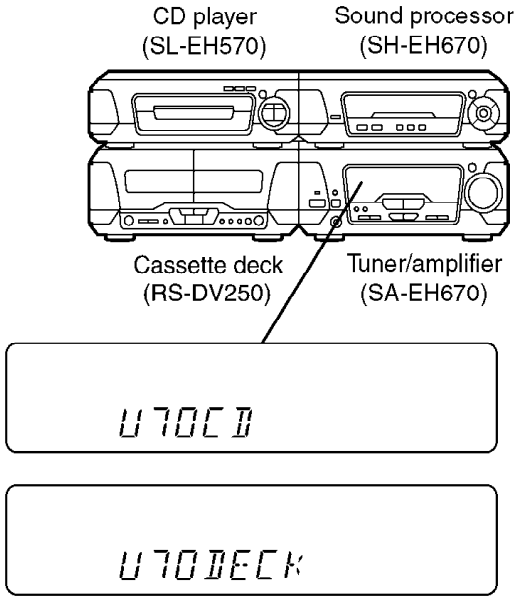
U70 CD: / U70 DECK:

Automatically displays on the tuner/amplifier when a malfunction occurs. Refer to Fig. 7-1.

F61:

Automatically displays on the tuner/amplifier when a malfunction occurs. Refer to Fig. 7-1.

Fig. 7-1.



7.2. To return to the normal display

1. For U70 CD/U70 DECK

- **Press an any operation button on the tuner/amplifier.**
- **To re-display the code, switch the power off (POWER STANDBY button), and then switch power back on again.**

2. For F61

- **If F61 is displayed, the power will automatically be switched off and the standby indicator will light up.**
- **F61 will be displayed for 3 seconds, and then the clock will be displayed.**
- **To re-display the code, switch the power on. F61 will be re-**

displayed, and then after 3 seconds the clock will be displayed and the power will automatically switch off.

7.3. Display contents

7.3.1. U70 CD/U70 DECK / (displayed automatically)

- Problem or condition

  A bus-line communications error has occurred as a result of the flat cables being inserted incorrectly, thus preventing the system from operating.

- If U70 is displayed on the tuner/amplifier, the tape deck or CD Player cannot be operated by remote control.

- Correction Procedure

1. To check for correct insertion of flat cables.

   - Insert each connectors until you hear a click.
   - Insert the flat cables at the back of the unit in the order indicated. Refer to Fig. 7-2.
     Make sure the white side of the cables is on your right side. Refer to Fig. 7-3.

Fig. 7-2.

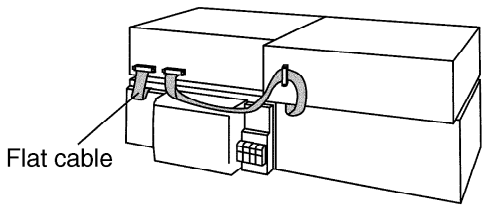
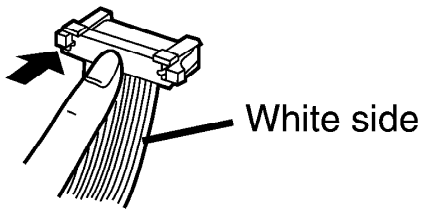


Fig. 7-3.



2. Breakage of flat cables. (Check and replace.)
3. If the problem is not corrected by items 1 and 2 above, this indicates a faulty IC.
   SA-EH670:
   IC901 (C2BBFD000317)
   SL-EH570:

IC451 (M38504E6255F)
RS-DV250:
IC701 (M38503M2406F)
Check these ICs and replace.

7.3.2. F61

- Problem or condition

When the power switch is switched on, it automatically switches back off, making it impossible to switch power on.

- Correction procedure

Faulty Tuner/Amplifier (SA-EH670) output IC (IC601). (When a DC voltage is applied to speaker terminals.)

8. Schematic Diagram Notes

- This schematic diagram may be modified at any time with the development of new technology.

Notes:

S901:

Power standby/on switch (/I)

S902:

Clock/timer switch (CLOCK/TIMER)

S903:

Demo switch (DEMO)

S904:

Play timer/record timer switch / (PLAY/ REC)

S905:

FM mode switch / (FM AUTO/MONO)

S906:

Tuning mode switch / (TUNING MODE)

S907:

Set switch (SET)

S908:

Source input switch / (INPUT SELECTOR)

S910:

Tuning down switch (TUNING, ∨)

S911:

Tuning up switch (TUNING, ∧)

S912:

Tuner/band switch (TUNER/BAND)

S913:

Muting switch (MUTING)

S914:

RDS display mode PS switch / (RDS DISP MODE-PS)

S915:

RDS display mode PTY switch / (RDS DISP MODE-PTY)

VR901:

Volume control VR (VOLUME)

- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on theinternal impedance of the DC circuit tester.

No mark

: Power ON (FM or AM)

- Important safety notice:

Components identified by ⚠ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of components, be sure to use only manufacturer´s specified parts shown in the parts list.

- The supply part number is described alone in the replacement parts list.

- Caution!

IC and LSI are sensitive to static electricity.

Secondary trouble can be prevented by taking care during repair.

Cover the parts boxes made of plastics with aluminum foil.

Ground the soldering iron.
Put a conductive mat on the work table.
Do not touch the legs of IC or LSI with the fingers directly.

- Voltage and signal line

: Positive voltage line

: Negative voltage line

: AM signal line

: AM OSC signal line

: FM signal line

: FM OSC signal line

: Audio signal line

9. Schematic Diagram

10. Printed Circuit Board Diagram

11. Type Illustration of ICs, Transistors and Diodes

12. Wiring Connection Diagram

13. Block Diagram

14. Terminal Function of ICs

14.1. IC901 (C2BBFD000317): / System Control/FL Drive

Pin No.	Terminal Name	I/O	Function
1	CHECK	I	Clock check signal input
2	LC72 DI	O	PLL data signal output for tuner unit (Z120)
3	LC72 CE	O	Chip enable signal output for tuner unit (Z120)
4	LC72 DI/ ST	I	IF count data/stereo detect signal input from tuner unit (Z120)
5	LC72 CK	O	Clock signal output for tuner unit (Z120)
6	ST/AV. / 6CH	-	Not used, open
7	NC	-	Not used, open
8			
9	SEL TUNER	-	Not used, open
10	SEL/ TUNER	-	Not used, connected to GND
11	AC IN	I	Power failure detect signal input
12	RESET	I	Reset signal input
13	X IN	I	Oscillator connected terminal (32.7 kHz)
14	X OUT	O	
15	V_{SS}	-	GND terminal
16	XC IN	I	Oscillator connected terminal (6 MHz)
17	XC OUT	O	
18	V_{DD} 1	I	Power supply terminal
19	KEY TU	I	Operation key signal input
20	KEY KARAOKE	I	Operation key signal input
21	SH REQ	O	Request signal output from Sound Processor
22	NC(GND)	-	Not used, connected to GND
23	VR JOGB	I	Volume control signal input
24	VR JOGA		
25	MIC DET	I	Microphone connecting detect signal input (Not used, connected to V_{DD})
26	HP SW	I	Headphone connecting detect signal input
27	RDS CLK	I	RDS clock signal input
28	RDS DATA	I	RDS data signal input
29	REMO / CON	I	Remote control signal input

Pin No.	Terminal Name	I/O	Function
30 | 37	8G | 1G	O	Grid signal output
38 | 45	P1 | P8	O	Segment signal output
46	V_{DD} 3	I	Power supply terminal
47 | 50	P9 | P12	O	Segment signal output
51	-VP	I	Power supply terminal (Negative)
52 | 71	P13 | P32	O	Segment signal output
72	V_{DD} 4	I	Power supply terminal
73 | 78	P33 | P38	O	Segment signal output
79	REGIN0	-	Not used, connected to GND
80	REGIN1		
81	STANDBY	O	LED (STANDBY) drive signal output
82	TIMER	O	LED (TIMER) drive signal output
83	S.W.LED	O	LED (MUTING) drive signal output
84	LOUNGE	-	LED (LOUNGE) drive signal output (Not used, connected to GND)
85	CHORUS	-	LED (CHORUS) drive signal output (Not used, connected to V_{DD})
86	MUTE	O	Muting signal output
87	NC	-	Not used, open
88	POWER	O	Power control signal output
89	V_{SS} 2	-	GND terminal
90	V_{DD} 2	I	Power supply terminal
91	MUTE2	O	Muting signal output
92	NC	-	Not used, open
93	MUTE3	O	Muting signal output
94	SH CS	O	Chip select signal output for Sound Processor

Pin No.	Terminal Name	I/O	Function
95	SH DO	O	Serial communication signal to Sound Processor (Data signal output)
96	SH DI	I	Serial communication signal to Sound Processor (Data signal input)
97	SH CK	I	Serial communication signal to Sound Processor (Clock signal input)
98	E DET	I	Unusual condition detect signal input
99	CR TIMER	-	Not used, open
100	SD	I	Station detector signal input from tuner unit (Z120)

15. Replacement Parts List

Notes:

- Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.

- The <IA> <IB> <IC> <ID> <IE> marks in Remarks indicate language of instruction manual.
<IA>: English
<IB>: German, Italian, French
<IC>: Spanish
<ID>: Russian, Polish, Czech
<IE>: Netherlands, Danish, Swedish

- The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)

- The marking [RTL] indicates that Retention Time is Limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The

retention period of availability is dependenton the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

- All parts are supplied by MESA.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1	RKM0395F-S	CABINET	1	
2	RHD30007-1S	SCREW	4	
3	XTBS3+10JFZ1	SCREW	1	
4	REX0967	WIRE ASS'Y	1	
5	RMQ1018	GASKET	1	
6	RGW0317-S	KNOB,VOLUME	1	
7	RHN90001	NUT	1	
8	RKA0106-N	FOOT RING	4	
9	RKF0606Q-K	BACK GRILL	1	
10	RKW0581-1V	FL WINDOW	1	
11	RMN0427A	CABLE HOLDER	1	
12	RYP1046-S	FRONT PANEL ASS'Y	1	
12-1	RGB0025-A	TECHNICS BADGE	1	
13	SHG1654	RUBBER	4	
14	XTB3+10JFZ	SCREW	10	
15	XTB3+8JFZ	SCREW	11	
16	XTW3+15T	SCREW	2	
17	XTBS3+8JFZ1	SCREW	2	
18	RLBT4001-N	FERRITE CORE	1	
19	RMN0582	HOLDER	1	
20	XTB3+12FFZ	SCREW	1	
21	XTB3+20JFZ	SCREW	1	
A1	EUR7702170	REMOTE CONTROL	1	
A1-1	UR64EC2337E	BATTERY COVER	1	
A2	RSA0007	FM INDOOR ANTENNA	1	
A3	REE1057	SPEAKER CORD	2	
A4	RSA0022-L	AM LOOP ANTENNA	1	
A5	RJA0019-1X	AC POWER SUPPLY / CORD	1	⚠
A6	RQCA0801	QUICK SET-UP GUIDE	1	
A7	RQCB0169	SERVICE CENTER LIST	1	
A8	RQT5992-B	OPERATING / INSTRUCTIONS	1	(EP)<IA>
A8	RQT5989-D	OPERATING / INSTRUCTIONS	1	(EG)<IB>
A8	RQT5991-E	OPERATING / INSTRUCTIONS	1	(E) <IC>
A8	RQT5993-R	OPERATING / INSTRUCTIONS	1	(EP)<ID>
A8	RQT5990-H	OPERATING / INSTRUCTIONS	1	(EG)<IE>
C151	ECA1CAK100XB	16V 10U	1	
C152	ECBT1H331KB5	50V 330P	1	F1D1H331A012
C153	ECBT1H102KB5	50V 1000P	1	F1D1H102A012
C154	ECBT1H561KB5	50V 560P	1	F1D1H561A012
C155	ECBT1H102KB5	50V 1000P	1	F1D1H102A012
C156,57	ECBT1H470J5	50V 47P	2	F1D1H470A006
C158,59	RCE0JKA470BG	6.3V 47U	2	F2A0J470A014

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C160	ECBT1H102KB5	50V 1000P	1	F1D1H102A012
C395,96	ECBT1H473KB5	50V 0.047U	2	
C509,10	ECBT1H103KB5	50V 0.01U	2	
C550	ECBT1H103KB5	50V 0.01U	1	
C551	ECA1HAK2R2XB	50V 2.2U	1	
C552	ECBT1H103KB5	50V 0.01U	1	
C553	RCE1HKAR47BG	50V 0.47U	1	F2A1HR47A015
C554	ECA1CAM221XB	16V 220U	1	
C601,02	ECA1CAK100XB	16V 10U	2	
C603,04	ECBT1H471KB5	50V 470P	2	F1D1H471A012
C607,08	ECBT1H471KB5	50V 470P	2	F1D1H471A012
C611,12	ECBT1H270J5	50V 27P	2	ECBT1H270J3
C613,14	ECBT1H470J5	50V 47P	2	F1D1H470A006
C616	ECEA1HKNR47B	50V 0.47U	1	
C617,18	ECKR2H103ZU	500V 0.01U	2	
C619-21	ECBT1H104KB5	50V 0.1U	3	F1D1H1040002
C622	RCE1AKA101BG	10V 100U	1	F2A1A1010020
C626-31	ECBT1H104KB5	50V 0.1U	6	F1D1H1040002
C635	ECBT1H473KB5	50V 0.047U	1	
C637	ECBT1H473KB5	50V 0.047U	1	
C639-44	ECBT1H102KB5	50V 1000P	6	F1D1H102A012
C645,46	ECBT1H473KB5	50V 0.047U	2	
C647-50	ECBT1H102KB5	50V 1000P	4	F1D1H102A012
C651	ECBT1H473KB5	50V 0.047U	1	
C652	ECBT1H102KB5	50V 1000P	1	F1D1H102A012
C655,56	ECA1CAK100XB	16V 10U	2	
C664	ECEA1CKS100	16V 10U	1	
C671,72	ECBT1H104KB5	50V 0.1U	2	F1D1H1040002
C673	ECA2AM010	100V 1U	1	
C701,02	F2B1V4720004	4700U	2	⚠
C703,04	ECA1VM332	3300U	2	⚠
C705	ECBT1H103KB5	50V 0.01U	1	
C706	RCE1VKA100BG	35V 10U	1	F2A1V1000011
C707,08	ECBT1H473KB5	50V 0.047U	2	
C709	ECQV1H104JM3	50V 0.15U	1	
C710	ECBT1H473KB5	50V 0.047U	1	
C714	ECBT1H102KB5	50V 1000P	1	F1D1H102A012
C715	ECA1EAM472XE	470U	1	⚠
C717	ECA1CAK330XB	16V 33U	1	
C718	ECA1CAK101XB	16V 100U	1	
C719,20	ECBT1H473KB5	50V 0.047U	2	
C721	RCE1AKA101BG	10V 100U	1	F2A1A1010020
C722	ECA1CAK101XB	16V 100U	1	
C723,24	ECBT1H473KB5	50V 0.047U	2	
C725	ECA1CAK470XB	16V 47U	1	
C731	ECBT1H102KB5	50V 1000P	1	F1D1H102A012
C732	ECBT1H223KB5	50V 0.022U	1	F1D1H223A012
C733	ECBT1H473KB5	50V 0.047U	1	
C734	RCE1HKA3R3BG	50V 3.3U	1	F2A1H3R3A015
C735	ECBT1H473KB5	50V 0.047U	1	
C737	ECA1HM101	100U	1	⚠
C740	ECA1CAK100XB	16V 10U	1	
C741	ECQE1104KF3	100V 0.1U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C753	ECKR1H103ZF5	50V 0.01U	1	F1B1H1030001
C754	ECBT1H103KB5	50V 0.01U	1	
C755	ECA1CAM102XB	1000U	1	⚠
C758	ECBT1H103KB5	50V 0.01U	1	
C759	RCE1AKA470BG	10V 47U	1	F2A1A470A011
C761	ECQE1104KF3	100V 0.1U	1	
C791	ECKWRS102MBC	1000P	1	⚠
C901	EEAFC0J101B	6.3V 100U	1	
C902	RCE1AM102BV	10V 1000U	1	
C903,04	ECBT1H103KB5	50V 0.01U	2	
C905	ECBT1H102KB5	50V 1000P	1	F1D1H102A012
C907,08	ECBT1H471KB5	50V 470P	2	F1D1H471A012
C909	ECBT1H102KB5	50V 1000P	1	F1D1H102A012
C910	ECBT1H200JC5	50V 20P	1	F1D1H200A015
C911	ECBT1H180J5	50V 18P	1	F1D1H180A006
C912	ECBT1H104KB5	50V 0.1U	1	F1D1H1040002
C913	ECBT1H102KB5	50V 1000P	1	F1D1H102A012
C914	ECA1HAK2R2XB	50V 2.2U	1	
C915	ECBT1H103KB5	50V 0.01U	1	
C916	EEAFC0J101B	6.3V 100U	1	
C917	ECBT1H103KB5	50V 0.01U	1	
C918	ECA0JAK101XB	6.3V 100U	1	
C919,20	RCE1HKA4R7BG	50V 4.7U	2	F2A1H4R70009
C921	ECBT1H102KB5	50V 1000P	1	F1D1H102A012
C922	ECA1VAK330XB	35V 33U	1	
C923,24	ECBT1H104KB5	50V 0.1U	2	F1D1H1040002
C925,26	ECBT1H102KB5	50V 1000P	2	F1D1H102A012
C927,28	RCE1HKA4R7BG	50V 4.7U	2	F2A1H4R70009
C931	ECEA1CKN100B	16V 10U	1	
CN601	RJU057W012	CONNECTOR(12P)	1	K1KB12B00033
CN602	RJU057W008	CONNECTOR(8P)	1	K1KB08B00034
CN701-13	RJS1A1101T1	CONNECTOR(1P)	13	
CN781	RJS10T5ZA	CONNECTOR(10P)	1	K1MP10A00007
CP101	RJT100W11	CONNECTOR(11P)	1	
CP601	RJT057W012-1	CONNECTOR(12P)	1	K1KA12A00160
CP602	RJT057W008-1	CONNECTOR(8P)	1	K1KA08A00187
D151	MA4051M	DIODE	1	MAZ40510M
D306	SELS5223C	LED	1	B3AAA0000486
D500	MA165	DIODE	1	MA2C165
D551,52	MA165	DIODE	2	MA2C165
D555	MA4100M	DIODE	1	MAZ41000M
D558	MA165	DIODE	1	MA2C165
D601,02	SB360L6508	DIODE	2	B0JAPG000014
D607	1SS291TA	DIODE	1	
D611	MA4051M	DIODE	1	MAZ40510M
D657-59	MA165	DIODE	3	MA2C165
D671,72	MA4140M	DIODE	2	MAZ41400MF
D673	MA4180L	DIODE	1	MAZ41800L
D701-04	1N5402BF	DIODE	4	⚠
D705	RL1N4003N02	DIODE	1	⚠

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
D711	RL1N4003N02	DIODE	1	
D717-20	RL1N4003N02	DIODE	4	⚠
D721	MA4300M	DIODE	1	MAZ43000M / ⚠
D723	MA4150M	DIODE	1	MAZ41500M / ⚠
D725	MA4082LTA	DIODE	1	MAZ40820LF / ⚠
D730	MA4091H	DIODE	1	MAZ40910HF / ⚠
D737	MA4082LTA	DIODE	1	MAZ40820LF / ⚠
D738-40	MA165	DIODE	3	MA2C165
D741-44	RL1N4003N02	DIODE	4	⚠
D745	MA4051M	DIODE	1	MAZ40510M
D746	RL1N4003N02	DIODE	1	
D747	MA4068L	DIODE	1	MAZ40680L / ⚠
D751,52	1N5402BF	DIODE	2	⚠
D753-55	RL1N4003N02	DIODE	3	⚠
D756,57	MA700	DIODE	2	MA2C700
D758	MA165	DIODE	1	MA2C165
D761	RL1N4003N02	DIODE	1	⚠
D901,02	1SS291TA	DIODE	2	
D904	MA165	DIODE	1	MA2C165
D905	1SS291TA	DIODE	1	
D906,07	MA165	DIODE	2	MA2C165
D933	MA165	DIODE	1	MA2C165
D951	LNJ301MPUJAD	LED	1	
D954	SELS5923C	LED	1	B3ADA0000083
D961	MA4075M	DIODE	1	MAZ40750M
D973	MA4030M	DIODE	1	MAZ40300M
D974	MA165	DIODE	1	MA2C165
F1	XBA2C20TB0	FUSE	1	K5D202BL0001 / ⚠
FL901	A2BB00000084	FL	1	
IC151	C1BB00000527	IC	1	
IC601	RSN309W44B	IC	1	⚠
IC901	C2BBFD000317	IC	1	
JK601	RJR0054G	JACK,	1	K4BC04B00018
JK603	K2HA103B0015	JACK,	1	
JK701	SJS9236-1	JACK,AC IN	1	K2AA2B000002 / ⚠
JK903	RJJ37TN02-C	JACK,HEADPHONE	1	K2HC103A0009
L151,52	ELEXT101KA9	COIL	2	
L153	RLQA1R0JT1-Y	COIL	1	G0C1R0JA0019
L601,02	RLQYR73MW1-0	COIL	2	G0ZZ00001606
L605,06	RLQYR73MW1-0	COIL	2	G0ZZ00001606
L701	RLQZ371	COIL	1	ELF15N035AN / ⚠
L901	RLQA100JT1-Y	COIL	1	G0C100JA0019
L902	RLQA1R0JT1-Y	COIL	1	G0C1R0JA0019
P1	RPG5520	PACKING CASE / (SYSTEM)	1	(E)
P1	RPG5519	PACKING CASE / (SYSTEM)	1	(EG)

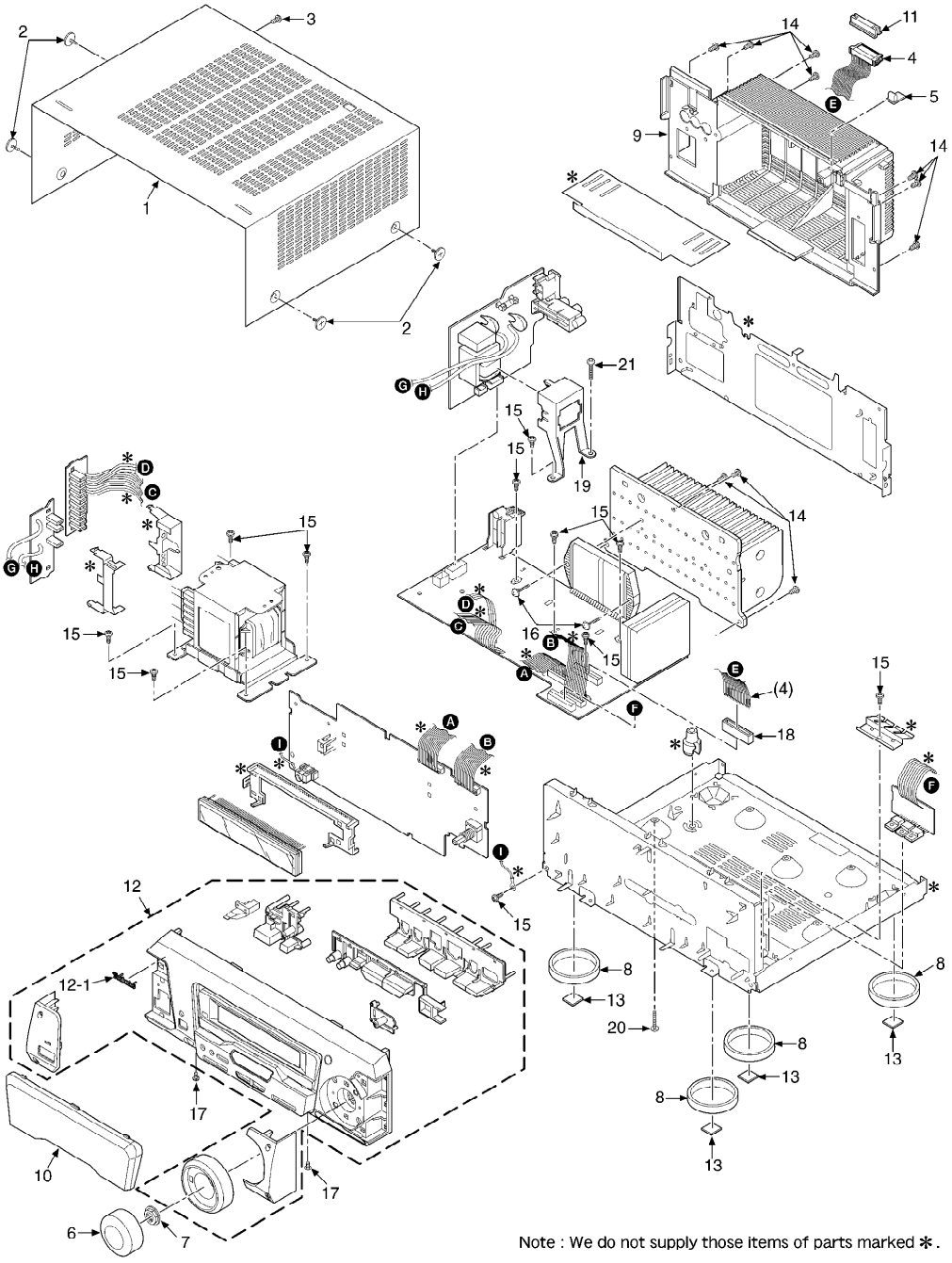
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
P1	RPG5521	PACKING CASE / (SYSTEM)	1	(EP)
P2	RPQ0951	PAD(SYSTEM)	1	
P3	RPG4397	PACKING CASE(RS)	1	
P3	RPG4396	PACKING CASE(SA)	1	
P3	RPG4398	PACKING CASE(SH)	1	
P3	RPG4399	PACKING CASE(SL)	1	
P4	RPN1195-2	PAD(RS)	1	
P4	RPN1194	PAD(SA)	1	
P4	RPN1196	PAD(SH)	1	
P4	RPN1203	PAD(SL)	1	
P5	RPF0139-1	PROTECTION BAG / (F.B.)	1	
P6	SPP740-1	SHEET	4	
PCB1	REP3115J-M	MAIN P.C.B	1	[RTL]
PCB2	REP3116G-S	SUB P.C.B	1	[RTL]
Q503	2SC5398RSTA	TRANSISTOR	1	B1AACF000059
Q551	2SA1995RSTA	TRANSISTOR	1	B1ACDF000006
Q554	2SA1995RSTA	TRANSISTOR	1	B1ACDF000006
Q555	2SC3327A	TRANSISTOR	1	
Q601,02	2SC5398RSTA	TRANSISTOR	2	B1AACF000059
Q607-10	2SC3327A	TRANSISTOR	4	
Q612	UN411FTA	TRANSISTOR	1	UNR411F00A
Q671,72	2SD1859QRTV2	TRANSISTOR	2	B1BAAJ000003
Q673	2SB1417PQTA	TRANSISTOR	1	2SB14170JA
Q701	2SD2374PQAU	TRANSISTOR	1	2SD23740J1AU / ⚠
Q702	2SB1548PQAU	TRANSISTOR	1	2SB15480J1AU / ⚠
Q705	2SA1995RSTA	TRANSISTOR	1	B1ACDF000006
Q707	2SB1417PQTA	TRANSISTOR	1	2SB14170JA / ⚠
Q708	UN4211	TRANSISTOR	1	UNR4211
Q709	2SC3327A	TRANSISTOR	1	
Q710	2SC3940AQSTA	TRANSISTOR	1	2SC3940ARA / ⚠
Q711	2SB1548PQAU	TRANSISTOR	1	2SB15480J1AU / ⚠
Q723	2SC3940AQSTA	TRANSISTOR	1	2SC3940ARA / ⚠
Q725	2SC5398RSTA	TRANSISTOR	1	B1AACF000059
Q726	2SC3940AQSTA	TRANSISTOR	1	2SC3940ARA / ⚠
Q791	2SC3327A	TRANSISTOR	1	
Q901	UN4212TA	TRANSISTOR	1	UNR421200A
Q902	UN411FTA	TRANSISTOR	1	UNR411F00A
R151,52	ERDS2FJ102	1/4W 1K	2	
R153,54	ERDS2FJ104	1/4W 100K	2	
R155	ERDS2FJ121	1/4W 120	1	
R157,58	ERDS2FJ102	1/4W 1K	2	
R229,30	ERDS2FJ102	1/4W 1K	2	
R509-12	ERDS2FJ470	1/4W 47	4	
R544	ERDS2FJ103	1/4W 10K	1	
R548	ERDS2FJ102	1/4W 1K	1	
R551,52	ERDS2FJ683	1/4W 68K	2	
R553,54	ERDS2FJ392	1/4W 3.9K	2	
R555	ERDS2FJ152	1/4W 1.5K	1	
R556	ERDS2FJ104	1/4W 100K	1	
R557	ERDS2FJ103	1/4W 10K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R558	ERDS2FJ102	1/4W 1K	1	
R559	ERDS2FJ472	1/4W 4.7K	1	
R561	ERDS2FJ104	1/4W 100K	1	
R563,64	ERDS2FJ272	1/4W 2.7K	2	
R570	ERDS2TJ225	1/4W 2.2M	1	ERDS2TJ225T
R572	ERDS2FJ153	1/4W 15K	1	
R591	ERDS2FJ472	1/4W 4.7K	1	
R597,98	ERDS2FJ222	1/4W 2.2K	2	
R601,02	ERDS2FJ222	1/4W 2.2K	2	
R603,04	ERDS2FJ332	1/4W 3.3K	2	
R605,06	ERDS2FJ472	1/4W 4.7K	2	
R607,08	ERDS2FJ563	1/4W 56K	2	
R609,10	ERDS2FJ823	1/4W 82K	2	
R617,18	ERDS2FJ472	1/4W 4.7K	2	
R621	ERDS2FJ154	1/4W 150K	1	
R622,23	ERDS2FJ124	1/4W 120K	2	
R624	ERDS2FJ154	1/4W 150K	1	
R627	ERDS2FJ474	1/4W 470K	1	
R628	ERDS2FJ223	1/4W 22K	1	
R635	ERDS2FJ222	1/4W 2.2K	1	
R637	ERDS2FJ153	1/4W 15K	1	
R638	ERDS2FJ683	1/4W 68K	1	
R639,40	ERDS1FJ100	10	2	⚠
R641,42	ERDS2FJ100	1/4W 10	2	
R647,48	ERDS2FJ2R2	2.2	2	⚠
R649-52	ERDS1FJ100	10	4	⚠
R671,72	ERDS2FJ272	1/4W 2.7K	2	
R673	ERDS2FJ331	1/4W 330	1	
R674	ER0S2TKF5362	METAL FILM RESISTOR	1	EROS2TKF5362
R675	ER0S2TKG5622	METAL FILM RESISTOR	1	EROS2TKG5622
R685,86	ERDS2FJ102	1/4W 1K	2	
R687,88	ERDS2FJ561	1/4W 560	2	
R692,93	ERDS2FJ102	1/4W 1K	2	
R694	ERDS2FJ223	1/4W 22K	1	
R695	ERDS2FJ471	1/4W 470	1	
R696	ERDS2FJ473	1/4W 47K	1	
R708	ERDS2FJ472	1/4W 4.7K	1	
R712	ERDS2FJ222	1/4W 2.2K	1	
R719	ERDS2FJ332	1/4W 3.3K	1	
R720	ERDS2FJ392	1/4W 3.9K	1	
R721	ERD2FCJ4R7	4.7	1	⚠
R722	ERQ16NKW2R2E	2.2	1	⚠
R723	ERDS2FJ562	1/4W 5.6K	1	
R724	ERDS2FJ392	1/4W 3.9K	1	
R725	ERDS2FJ100	1/4W 10	1	
R727	ERDS2FJ392	1/4W 3.9K	1	
R729	ERDS2FJ221	1/4W 220	1	
R738	ERDS2FJ392	1/4W 3.9K	1	
R739	ERDS2FJ473	1/4W 47K	1	
R749	ERDS2FJ102	1/4W 1K	1	
R763	ERDS2FJ472	1/4W 4.7K	1	
R764	ERDS2FJ331	1/4W 330	1	
R765	ERDS1FJ221	220	1	⚠

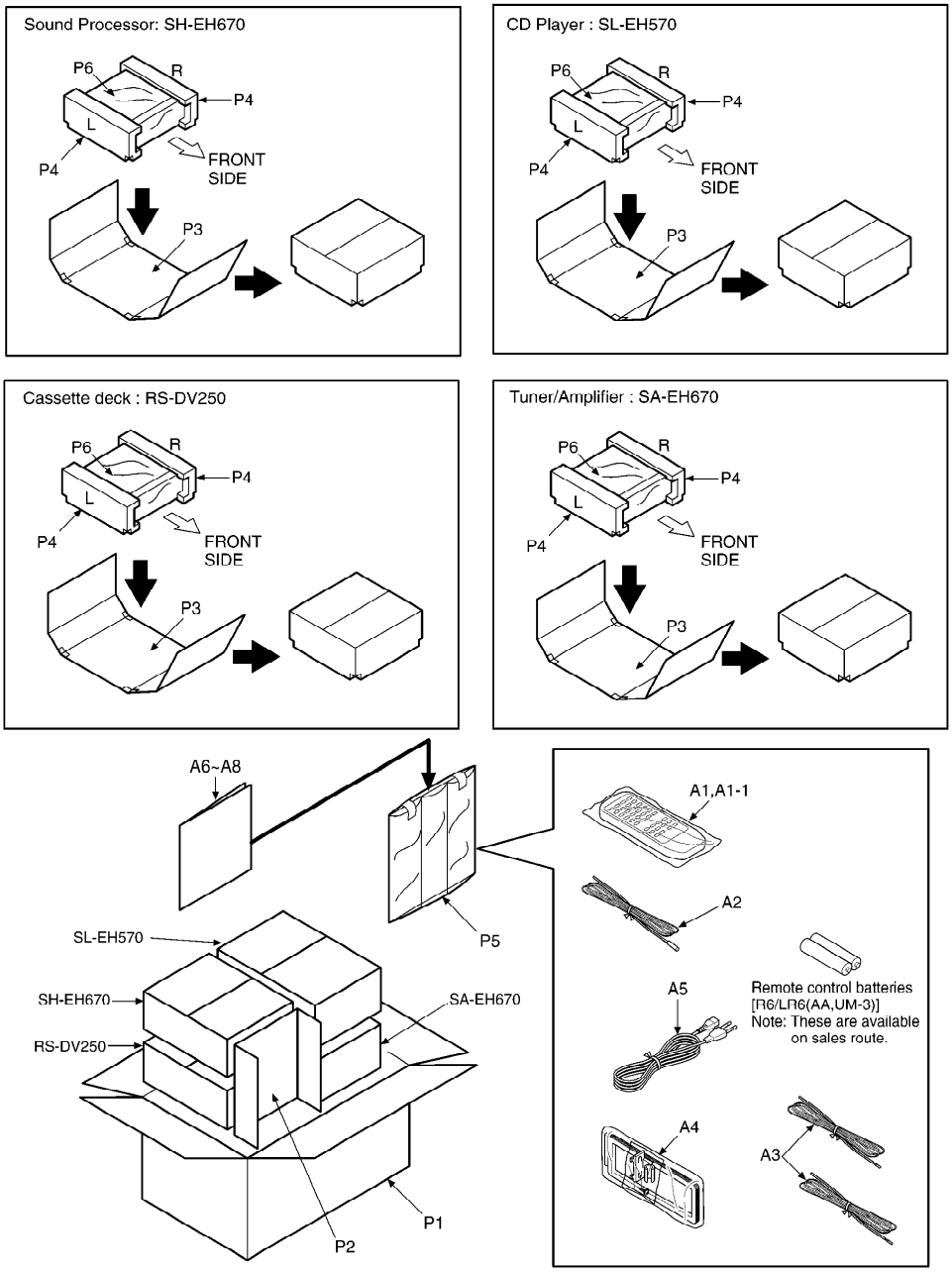
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R767	ERD2FCJ4R7	4.7	1	⚠
R768	ERDS2FJ101	1/4W 100	1	
R769	ERD25V0R00T	1/4W 0	1	
R771	ERDS2FJ222	1/4W 2.2K	1	
R772	ERDS2FJ223	1/4W 22K	1	
R773,74	ERDS1FJ180	18	2	ERDS1FVJ180T / ⚠
R776	ERDS2FJ103	1/4W 10K	1	
R777	ERDS2FJ102	1/4W 1K	1	
R791,92	RSFMB40KT-L	PROTECTOR	2	K5G402A00010 / ⚠
R793	ERDS2FJ1R0	1/4W 1	1	
R794	ERDS2FJ473	1/4W 47K	1	
R795	ERDS2FJ392	1/4W 3.9K	1	
R797	ERDS2T0T	1/4W 0	1	
R798	ERQ16NKW2R2E	2.2	1	⚠
R901	ERDS2FJ821	1/4W 820	1	
R902	ERDS2FJ102	1/4W 1K	1	
R903	ERDS2FJ122	1/4W 1.2K	1	
R904	ERDS2FJ152	1/4W 1.5K	1	
R905	ERDS2FJ182	1/4W 1.8K	1	
R906	ERDS2FJ222	1/4W 2.2K	1	
R907	ERDS2FJ332	1/4W 3.3K	1	
R909	ERDS2FJ182	1/4W 1.8K	1	
R910	ERDS2FJ222	1/4W 2.2K	1	
R911	ERDS2FJ332	1/4W 3.3K	1	
R912	ERDS2FJ472	1/4W 4.7K	1	
R913	ERDS2FJ821	1/4W 820	1	
R914	ERDS2FJ102	1/4W 1K	1	
R915	ERDS2FJ122	1/4W 1.2K	1	
R916	ERDS2FJ152	1/4W 1.5K	1	
R918	ERDS2FJ103	1/4W 10K	1	
R919	ERDS2FJ153	1/4W 15K	1	
R921,22	ERDS2FJ103	1/4W 10K	2	
R924,25	ERDS2FJ102	1/4W 1K	2	
R926	ERDS2FJ222	1/4W 2.2K	1	
R928	ERDS2FJ473	1/4W 47K	1	
R929-32	ERDS2FJ102	1/4W 1K	4	
R934-36	ERDS2FJ101	1/4W 100	3	
R937	ERDS2FJ103	1/4W 10K	1	
R939	ERDS2FJ152	1/4W 1.5K	1	
R941	ERDS2FJ102	1/4W 1K	1	
R942	ERDS2FJ222	1/4W 2.2K	1	
R943	ERDS2FJ101	1/4W 100	1	
R944	ERDS2FJ222	1/4W 2.2K	1	
R945	ERDS2FJ101	1/4W 100	1	
R946	ERDS2FJ102	1/4W 1K	1	
R949	ERDS2FJ472	1/4W 4.7K	1	
R950	ERDS2FJ101	1/4W 100	1	
R951	ERDS2FJ334	1/4W 330K	1	
R952	ERDS2TJ106T	1/4W 10M	1	
R953	ERDS2FJ101	1/4W 100	1	
R954	ERDS2FJ104	1/4W 100K	1	
R956-58	ERDS2FJ102	1/4W 1K	3	
R959	ERDS2FJ470	1/4W 47	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R960	ERDS2FJ152	1/4W 1.5K	1	
R961,62	ERDS2FJ223	1/4W 22K	2	
R965,66	ERDS2FJ392	1/4W 3.9K	2	
R969	ERDS2FJ272	1/4W 2.7K	1	
R974	ERDS2FJ102	1/4W 1K	1	
R975	ERDS2FJ223	1/4W 22K	1	
R976	ERDS2FJ104	1/4W 100K	1	
R986	ERDS2FJ152	1/4W 1.5K	1	
R987,88	ERDS2FJ102	1/4W 1K	2	
R990	ERDS2FJ104	1/4W 100K	1	
R991	ERDS2FJ473	1/4W 47K	1	
R993,94	ERDS2FJ104	1/4W 100K	2	
R995	ERDS2FJ221	1/4W 220	1	
R996,97	ERDS2FJ151	1/4W 150	2	
R999	ERDS2FJ104	1/4W 100K	1	
RL702	RSY0040M-0	RELAY	1	⚠
S901-08	EVQ11G05R	SW,PUSH	8	
S910-15	EVQ11G05R	SW,PUSH	6	
T701	RTP2N5B012	POWER TRANSFORMER	1	ETP76VST71SA / ⚠
T702	RTP1H3E001	POWER TRANSFORMER	1	⚠
VR901	EVQVBXFK124B	V.R.,VOLUME	1	
X151	RSXC4M33S02T	OSCILLATOR	1	H0H433400001
X901	EF0EC6004T4	OSCILLATOR	1	EFOEC6004T4
X902	RSXD32K7S02	OSCILLATOR	1	H0A327200027
Z120	RAN0005EM-2	TUNER UNIT	1	
Z701	ENC471D5ATRB	B.P.F	1	J0LG00000006 / ⚠
Z901	B3RAD0000028	B.P.F	1	

16. Cabinet Parts Location

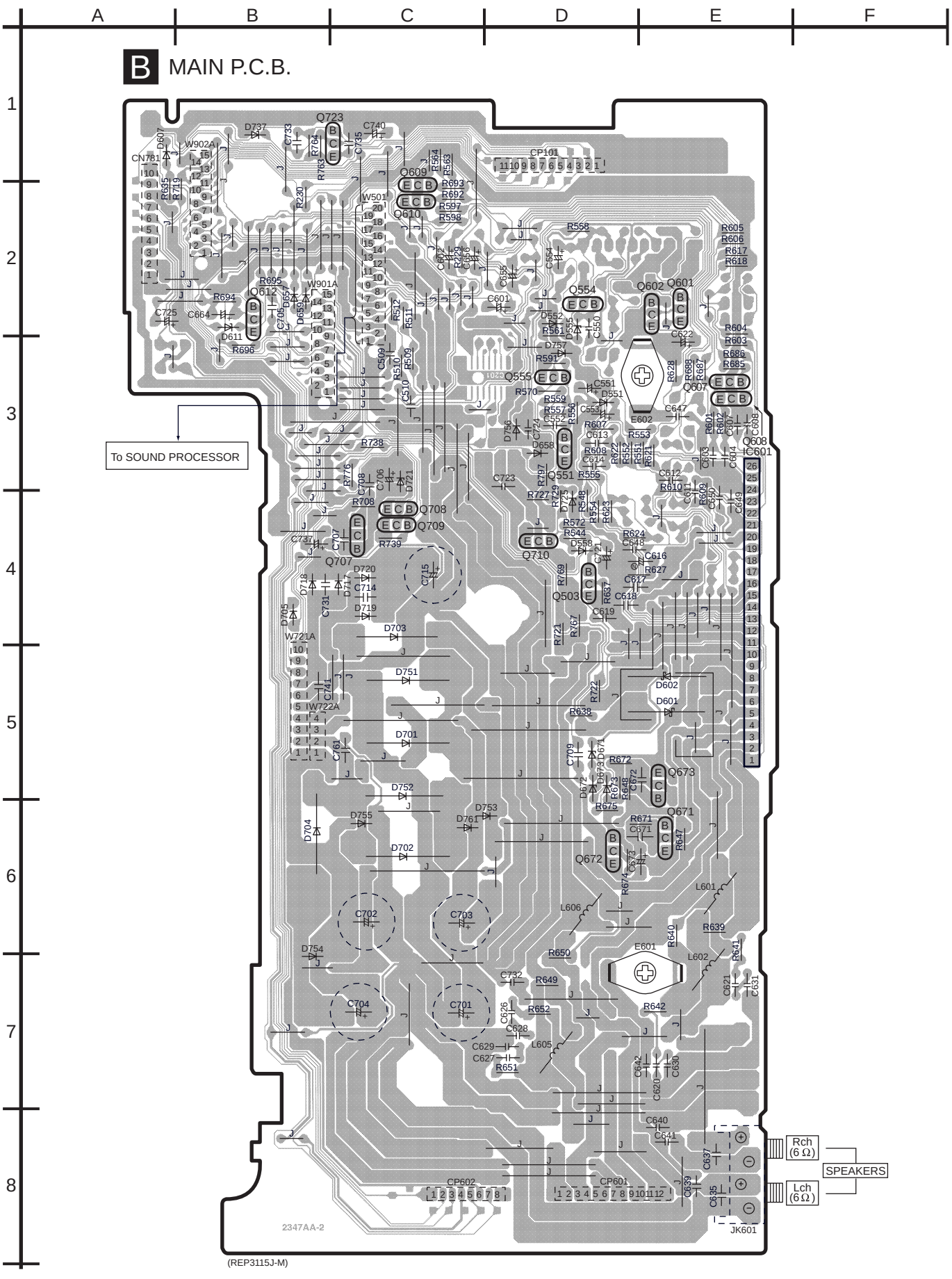


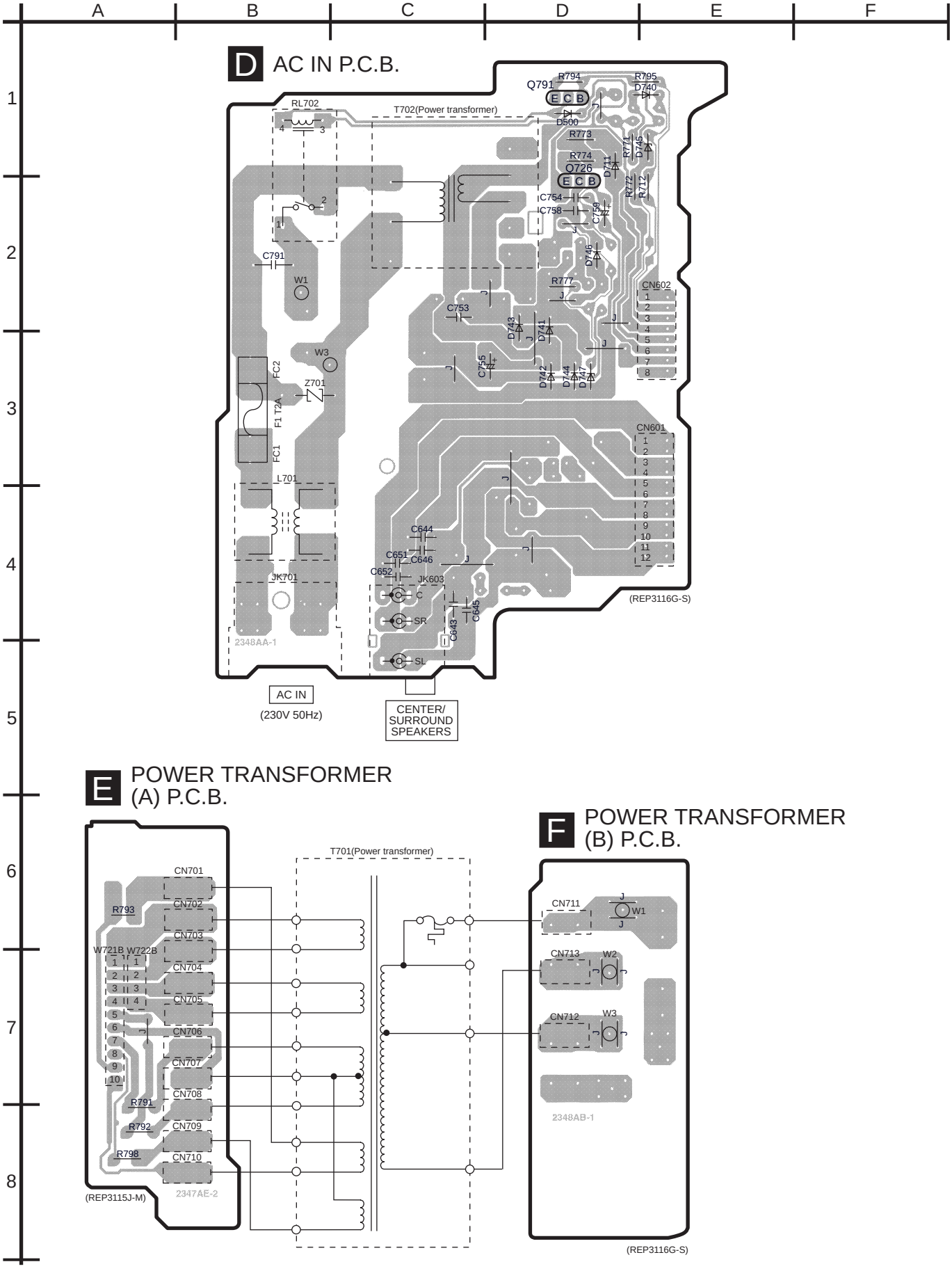
17. Packaging



F010500000YM/KH

B MAIN P.C.B.


A
B
C
D
E
F
1
2
3
4
5
6
7
8
To SOUND PROCESSOR
Rch (6 Ω)
Lch (6 Ω)
SPEAKERS
JK601
CP101
CP601
CP602
CN781
W902A
W901A
W501
W721A
IW722A
Q723
Q609
Q610
Q612
Q554
Q602
Q601
Q555
Q607
Q608
IC601
Q551
Q708
Q709
Q707
Q710
Q503
Q673
Q671
Q672
E602
E601
D737
D607
D611
D612
D602
D601
D703
D751
D701
D752
D753
D761
D755
D704
D702
D754
D720
D719
D705
D718
D717
D721
D756
D658
D552
D757
D551
L601
L606
L602
L605
2347AA-2
(REP3115J-M)

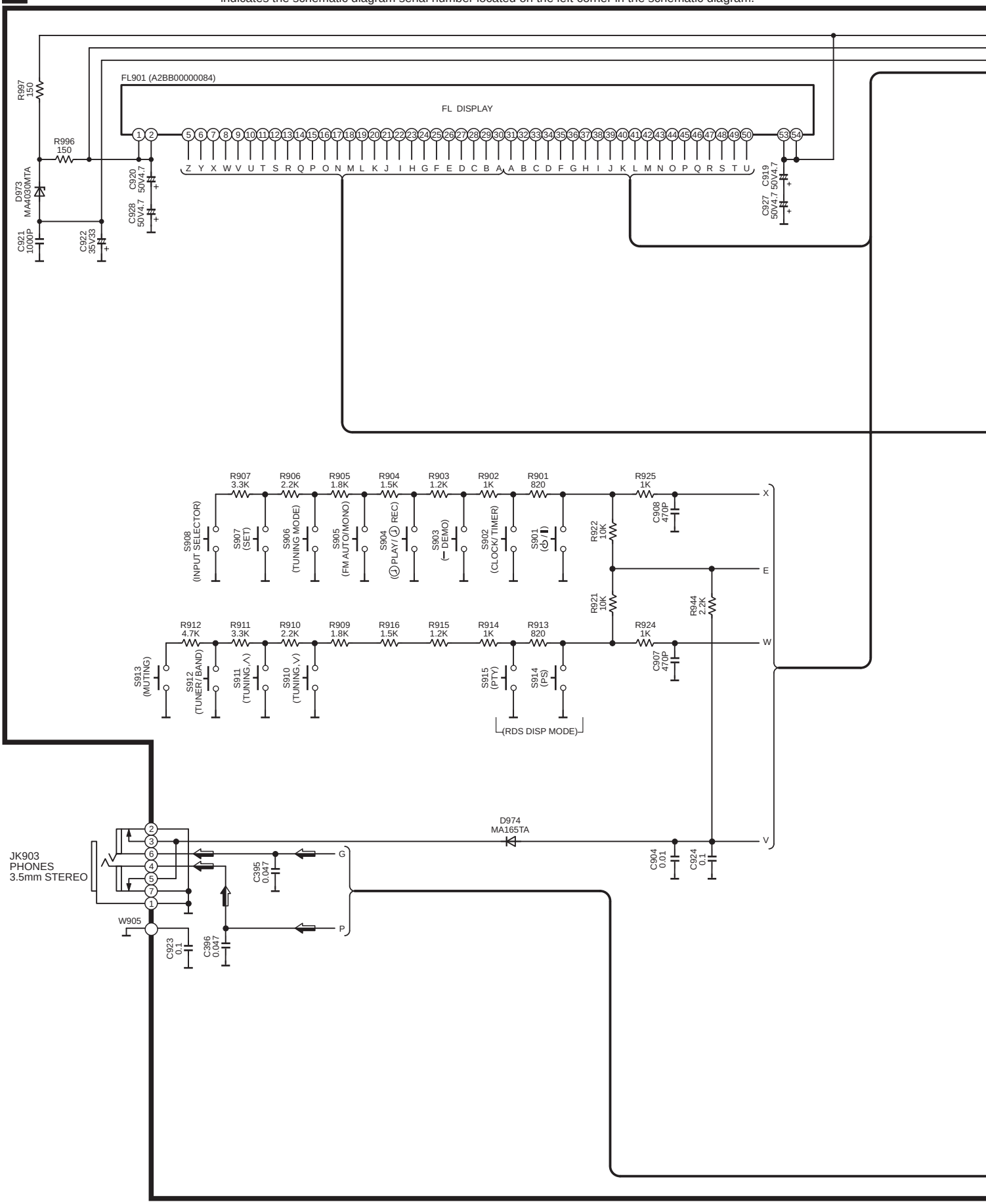

A
B
C
D
E
F
1
2
3
4
5
6
7
8
D AC IN P.C.B.
RL702
T702(Power transformer)
Q791
R794
R795
D740
D500
R773
R774
Q726
D711
R771
D745
R772
R712
C754
C758
C759
C791
W1
D746
R777
CN602
C753
D743
D741
W3
FC2
Z701
C755
D742
D744
D747
F1 T2A
FC1
CN601
L701
C644
C651
C646
C652
JK603
JK701
C
SR
SL
C645
C643
2348AA-1
(REP3116G-S)
AC IN
(230V 50Hz)
CENTER/
SURROUND
SPEAKERS
E POWER TRANSFORMER
(A) P.C.B.
F POWER TRANSFORMER
(B) P.C.B.
T701(Power transformer)
CN701
CN702
CN703
CN704
CN705
CN706
CN707
CN708
CN709
CN710
R793
W721B
W722B
R791
R792
R798
2347AE-2
(REP3115J-M)
CN711
W1
CN713
W2
CN712
W3
2348AB-1
(REP3116G-S)

SCHEMATIC DIAGRAM-1

A OPERATION CIRCUIT

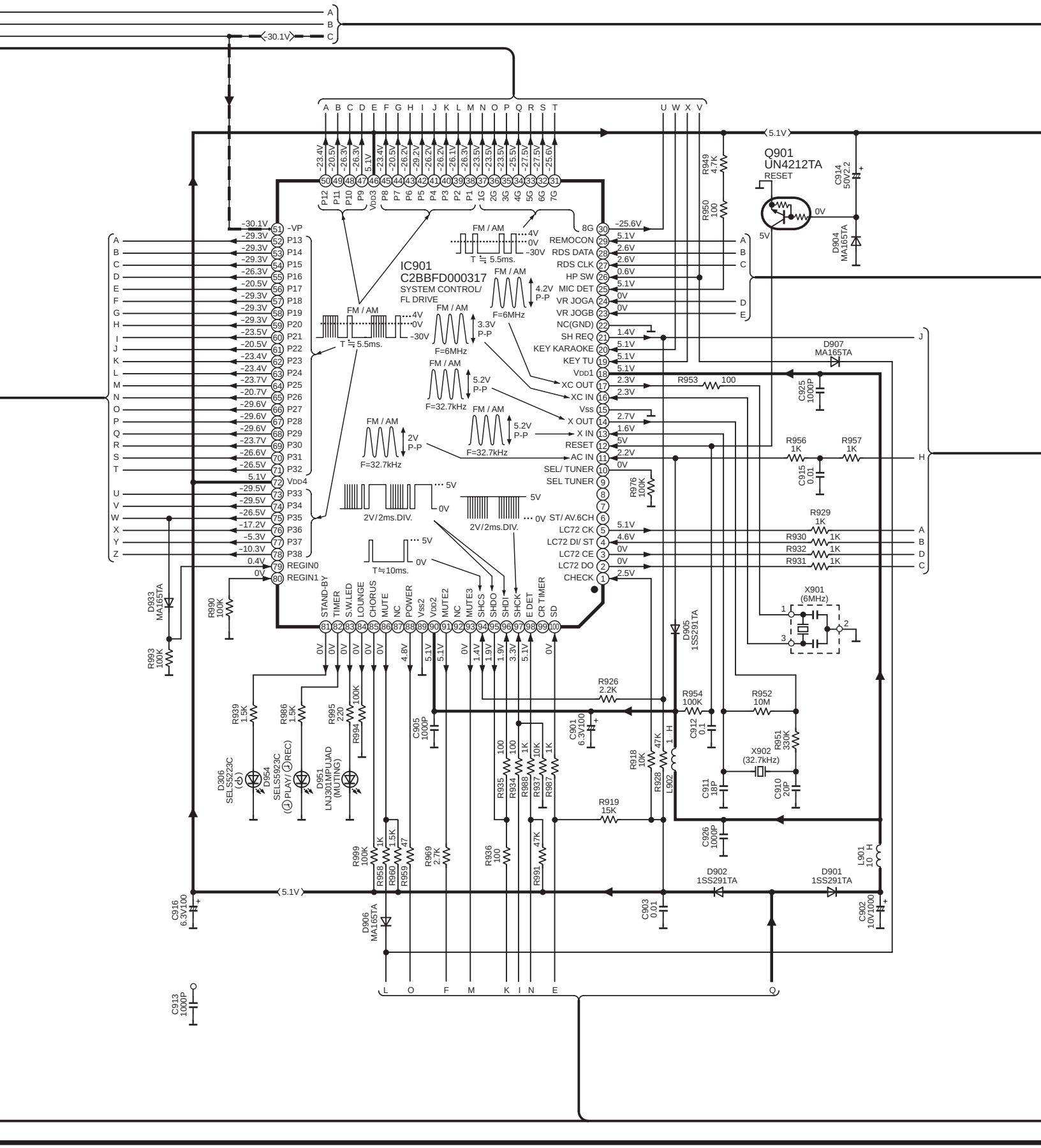
NOTE:
The number which noted at the connectors on the schematic diagram as "SCHEMATIC DIAGRAM-1" or "SCHEMATIC DIAGRAM-2" indicates the schematic diagram serial number located on the left corner in the schematic diagram.

⇒ :AUDIO SIGNAL LINE



SCHEMATIC DIAGRAM-2

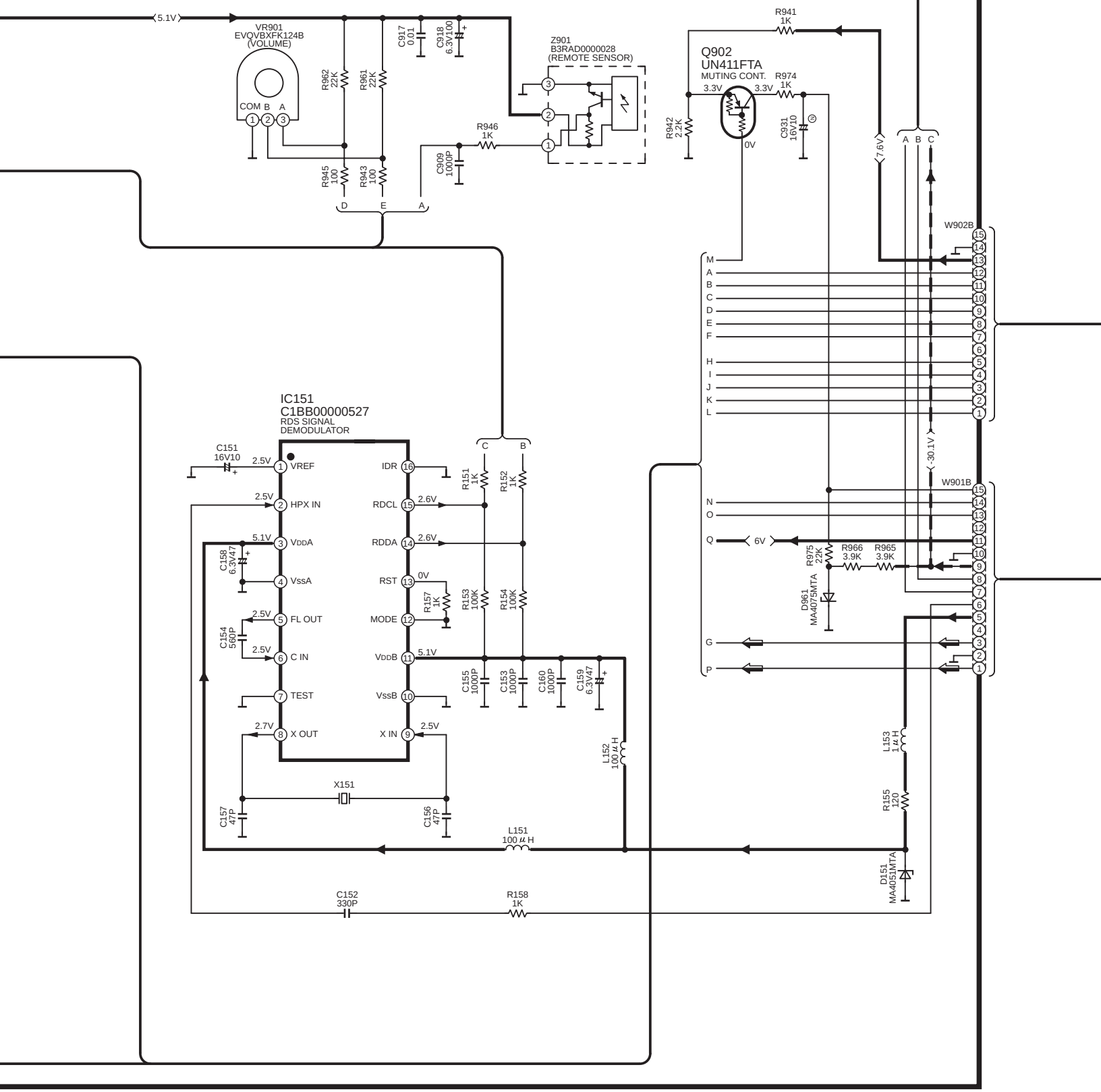
: POSITIVE VOLTAGE LINE — : NEGATIVE VOLTAGE LINE



SCHEMATIC DIAGRAM-3

A OPERATION CIRCUIT

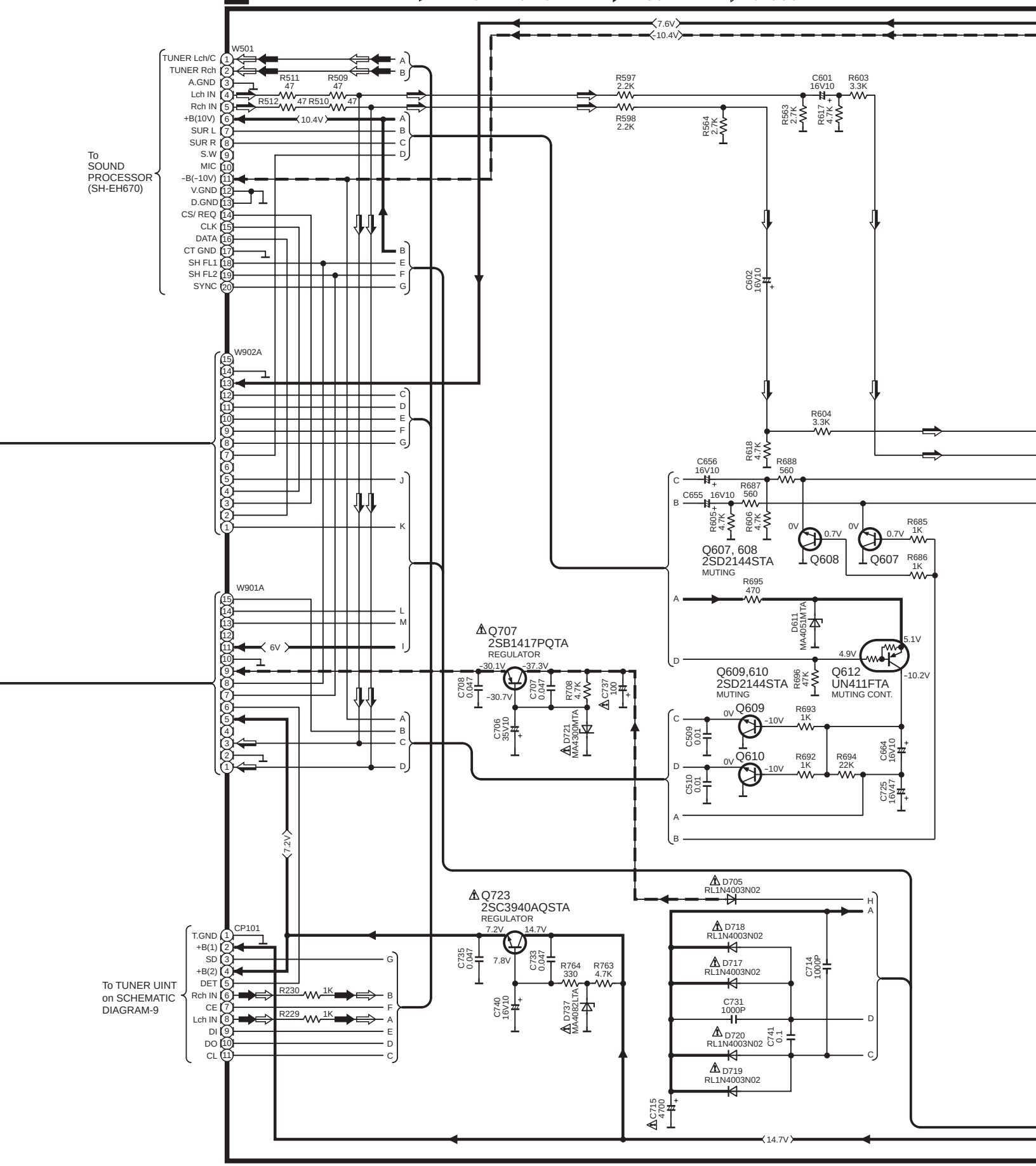
: POSITIVE VOLTAGE LINE : NEGATIVE VOLTAGE LINE :AUDIO SIGNAL LINE



SCHEMATIC DIAGRAM-4

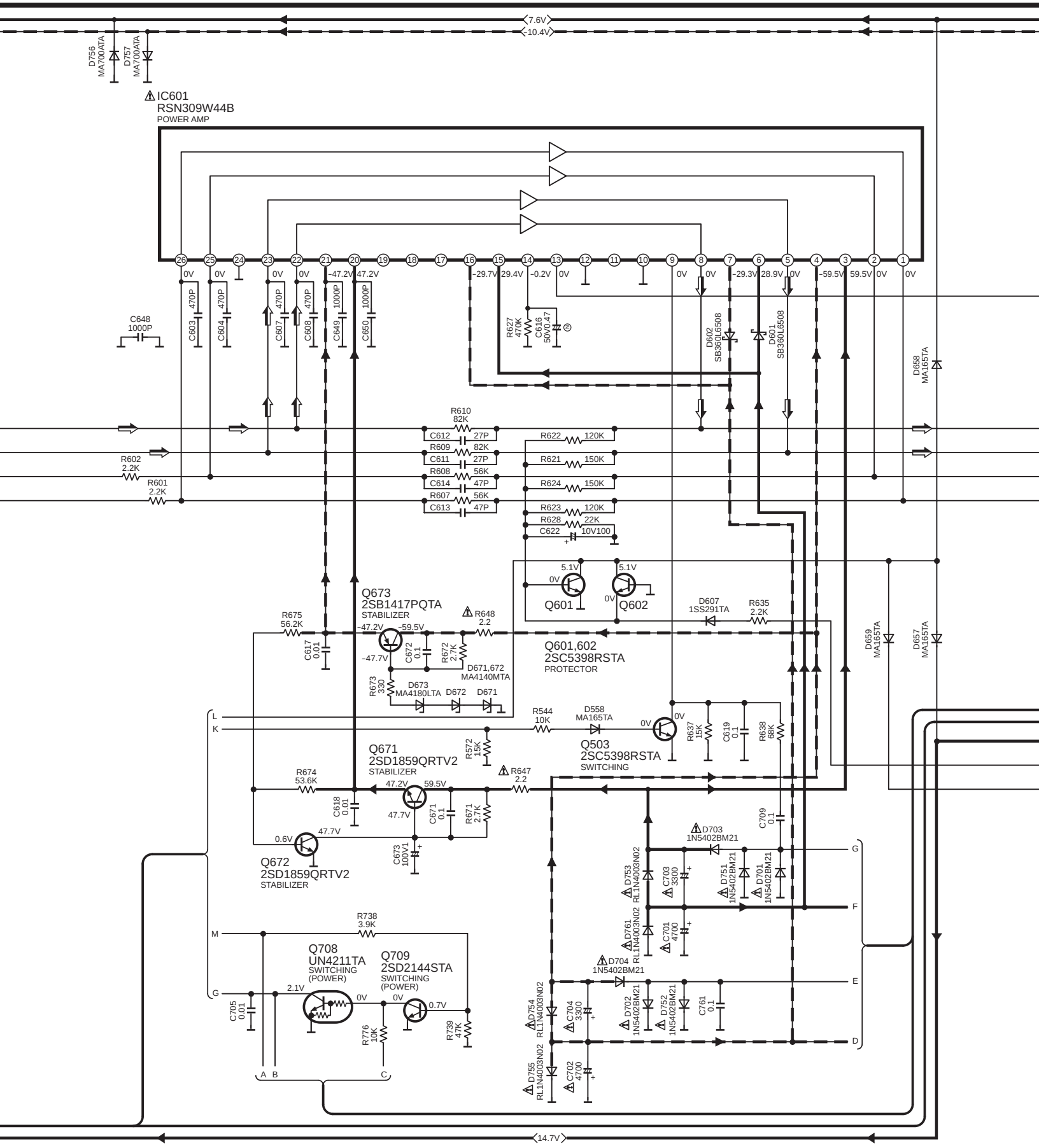
B MAIN CIRCUIT

: POSITIVE VOLTAGE LINE
: NEGATIVE VOLTAGE LINE
: FM SIGNAL LINE
: AM SIGNAL LINE
:AUDIO SIGNAL LINE



SCHEMATIC DIAGRAM-5

: POSITIVE VOLTAGE LINE
: NEGATIVE VOLTAGE LINE :AUDIO SIGNAL LINE



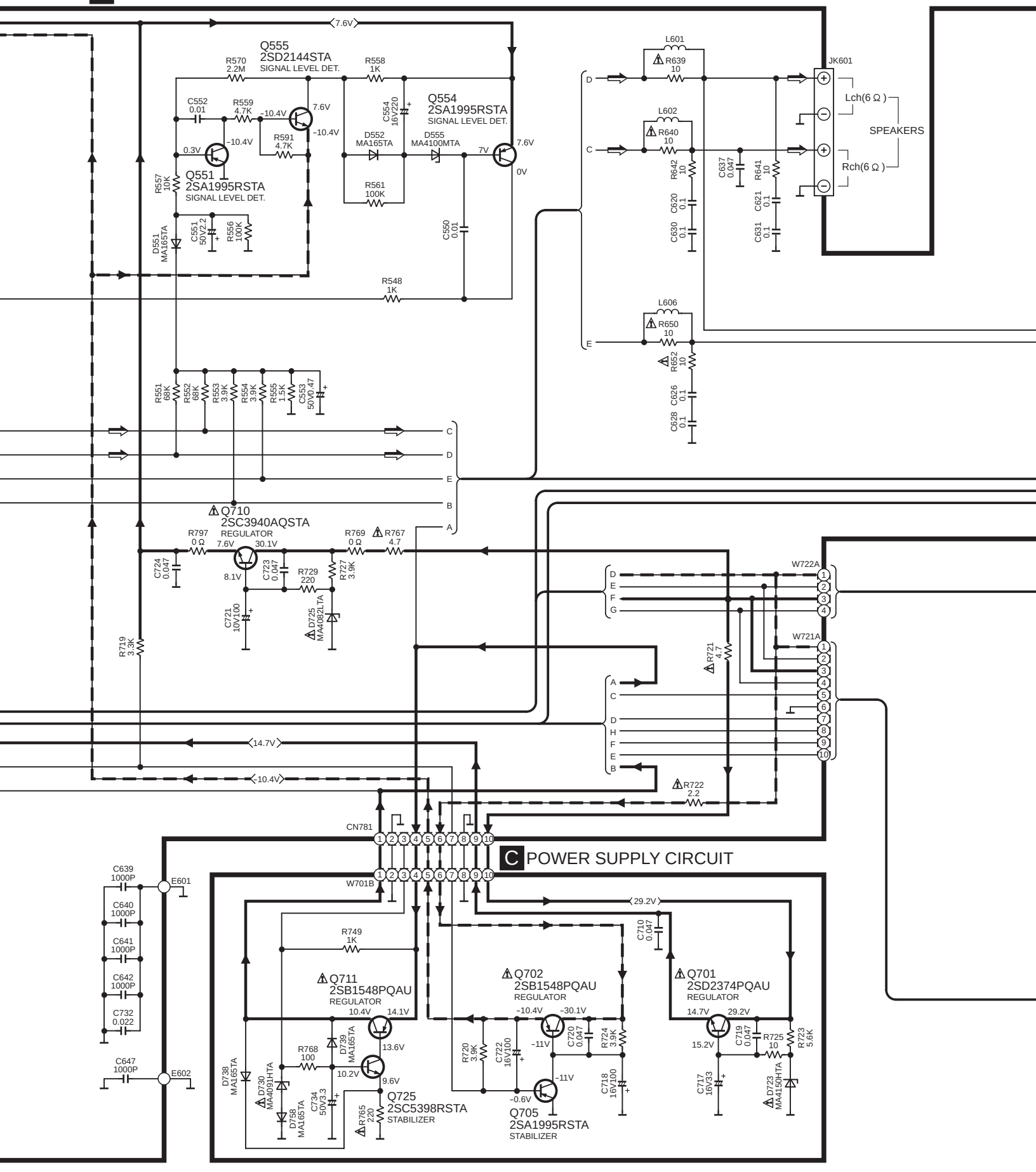
SCHEMATIC DIAGRAM-6

B MAIN CIRCUIT

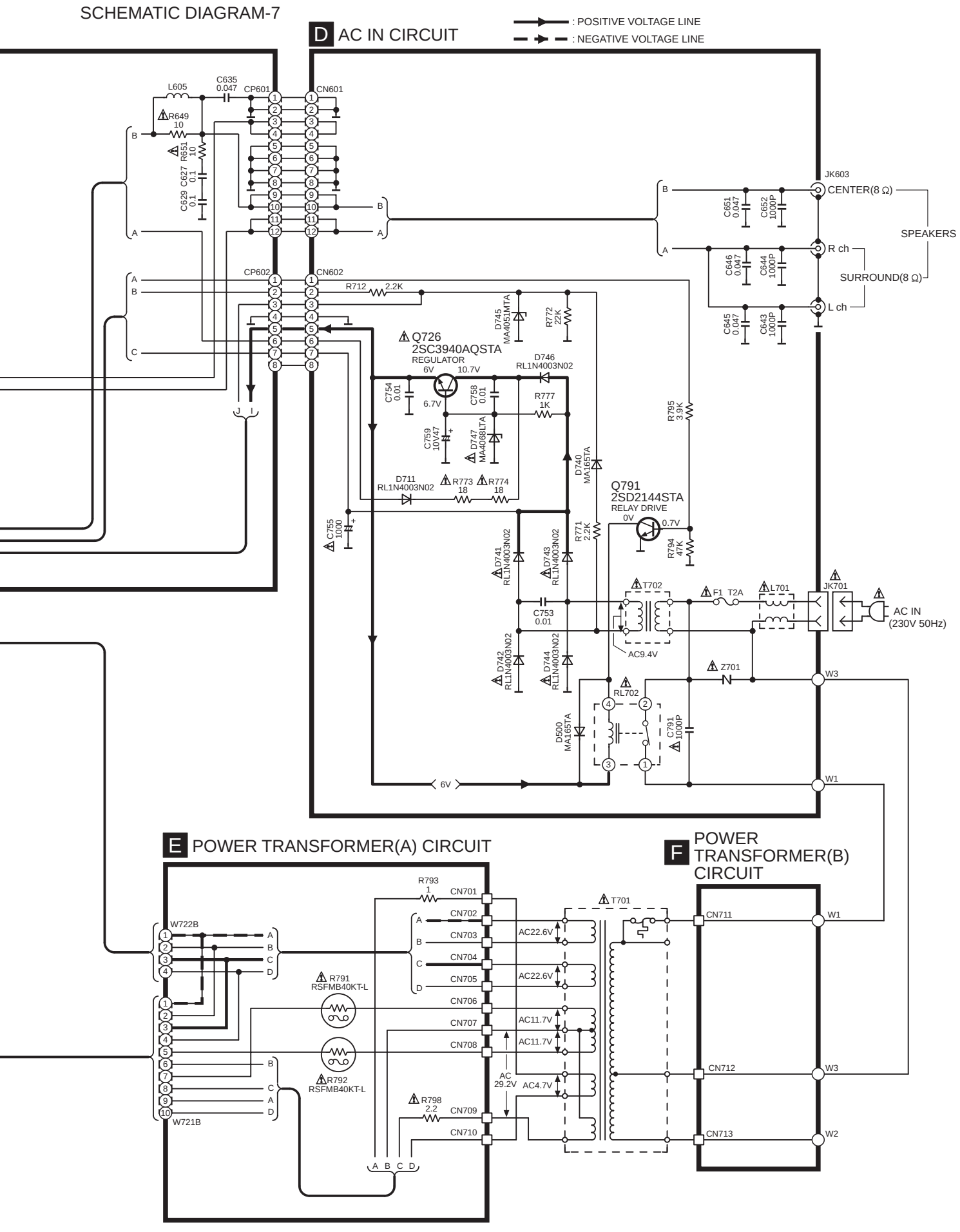
: POSITIVE VOLTAGE LINE

: NEGATIVE VOLTAGE LINE

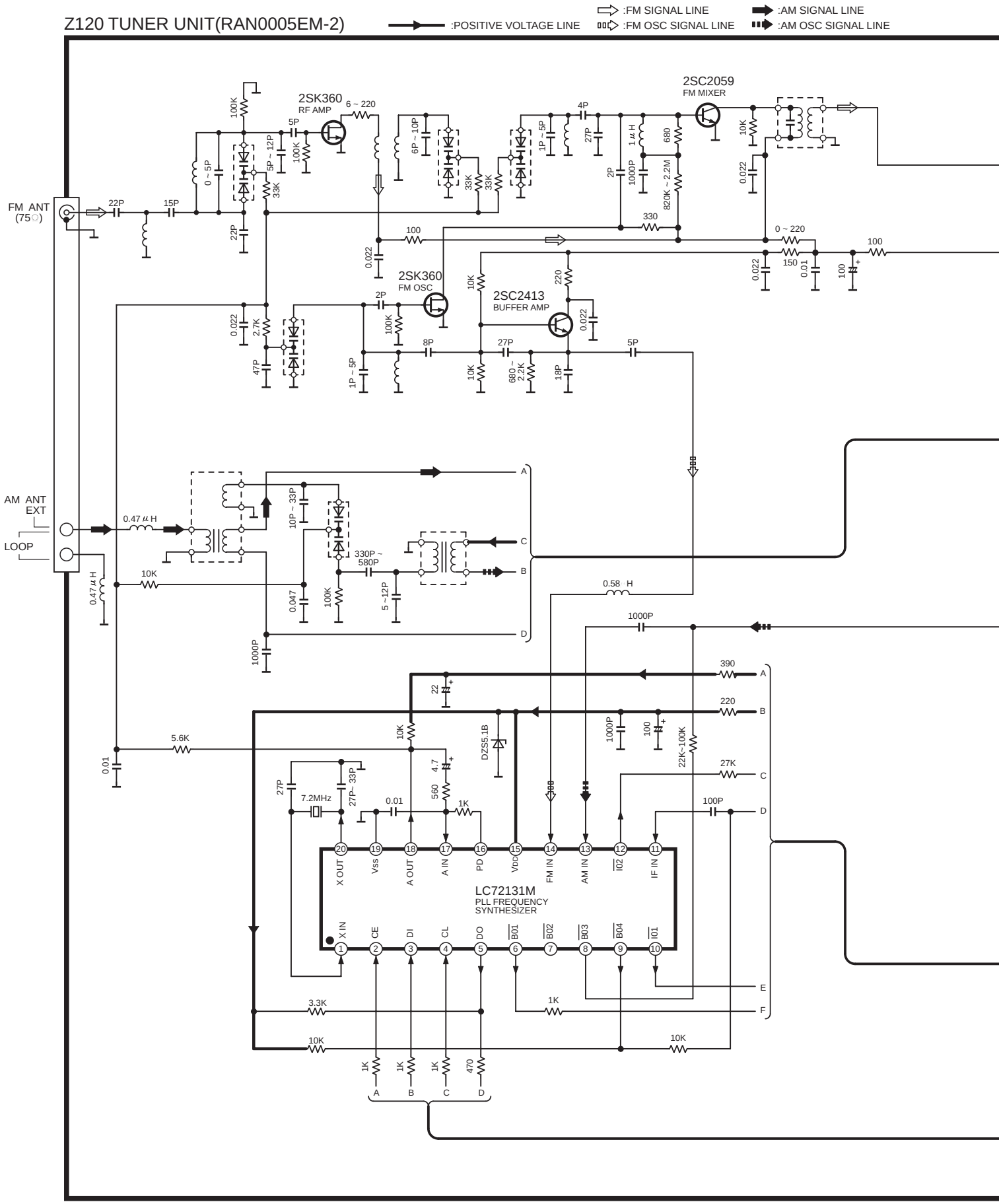
:AUDIO SIGNAL LINE



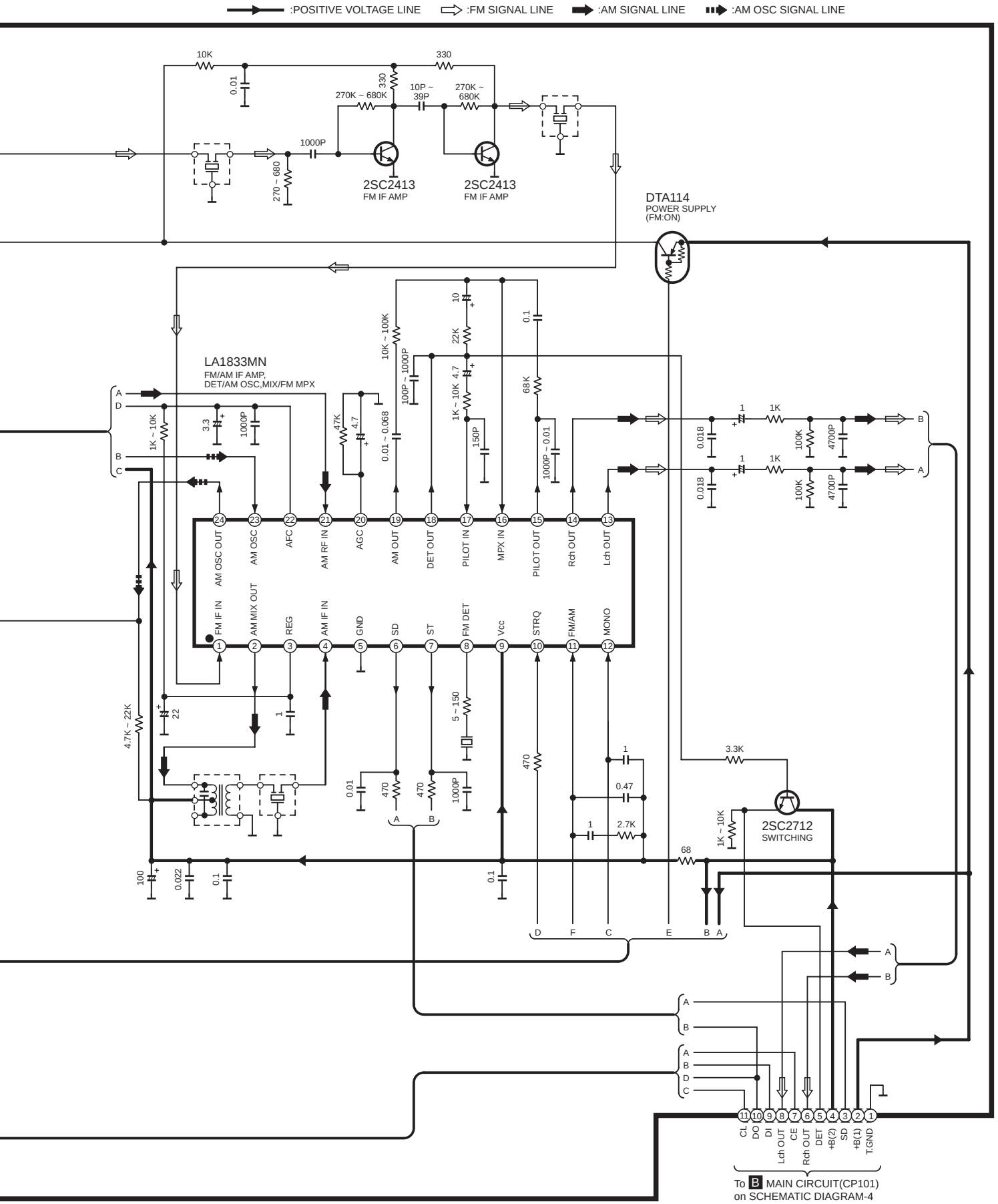
SCHEMATIC DIAGRAM-7



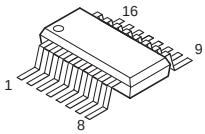
SCHEMATIC DIAGRAM-8



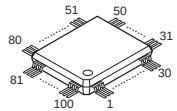
SCHEMATIC DIAGRAM-9



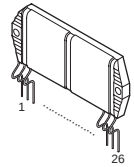
C1BB00000527



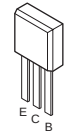
C2BBFD000317



RSN309W44B



UN411FTA
UN4211TA
UN4212TA



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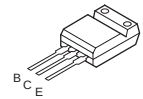
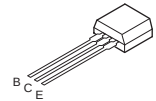


2SD2144STA



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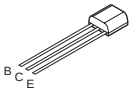
2SC5398RSTA



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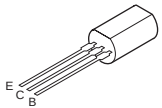

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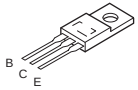

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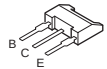
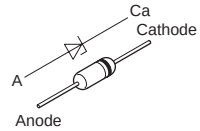
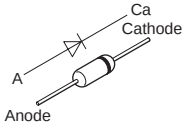


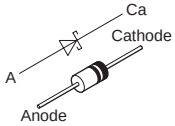


MA4100MTA
MA4150HTA
MA4300MTA
MA4140MTA
MA4180LTA

MA165TA



SB360L6508



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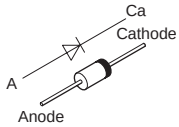
RL1N4003N02



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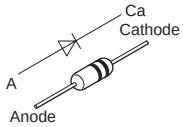
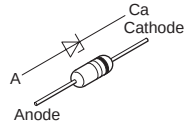
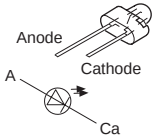


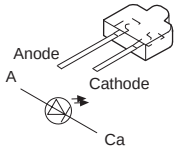


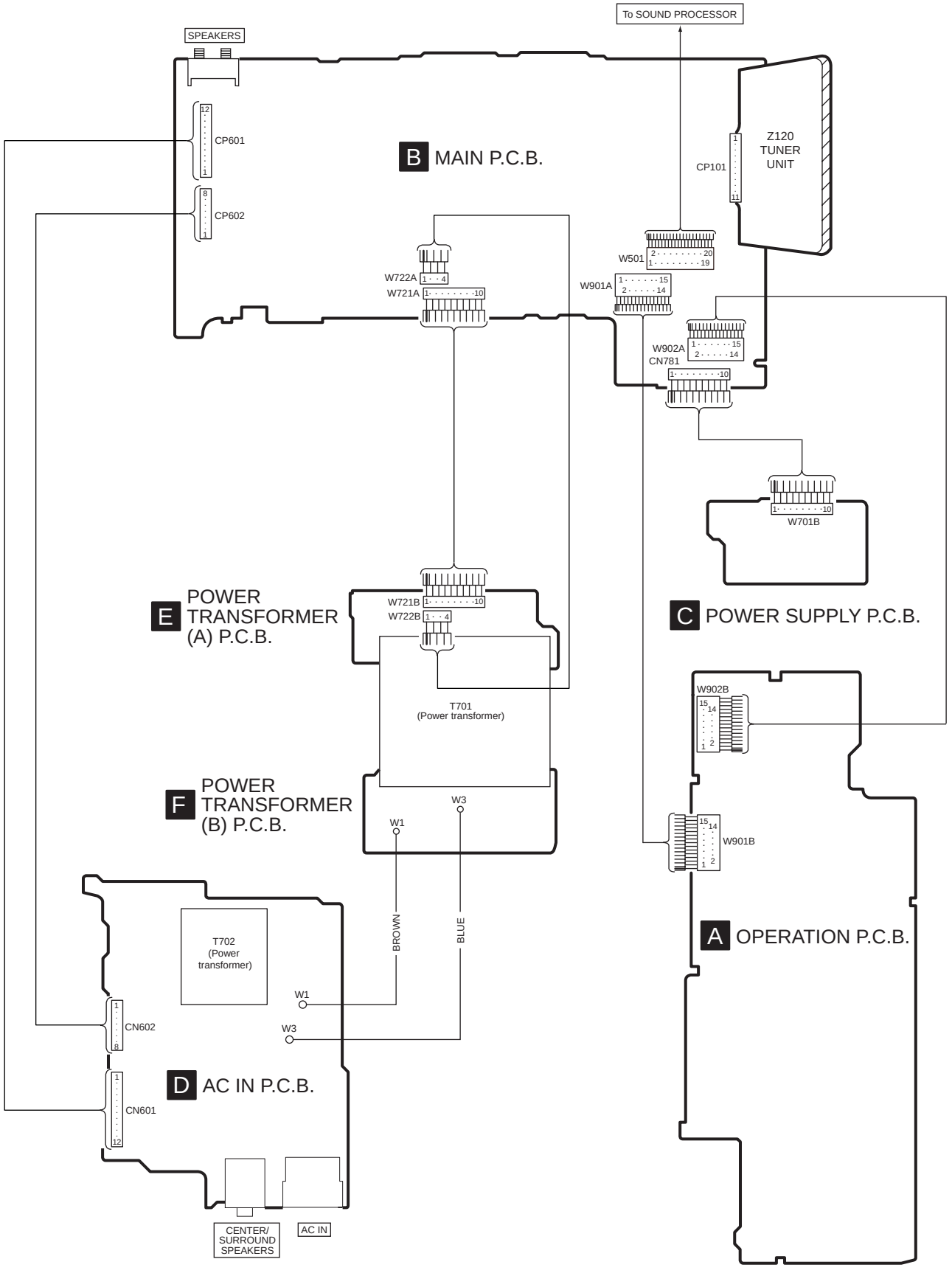
MA4030MTA
MA4051MTA
MA4068LTA
MA4075MTA
MA4082LTA
MA4091HTA

LNJ301MPUJAD

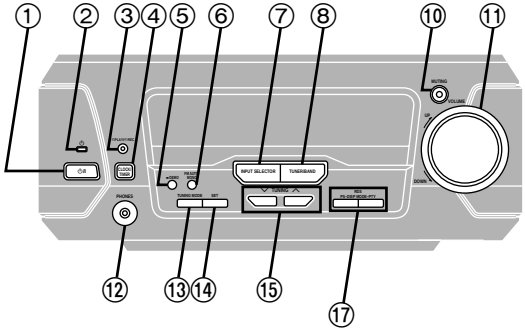


SELS5223C
SELS5923C




To SOUND PROCESSOR
SPEAKERS
CP601
CP602
B MAIN P.C.B.
CP101
Z120
TUNER
UNIT
W501
W901A
W722A
W721A
W902A
CN781
W701B
C POWER SUPPLY P.C.B.
E POWER
TRANSFORMER
(A) P.C.B.
W721B
W722B
T701
(Power transformer)
W902B
F POWER
TRANSFORMER
(B) P.C.B.
W3
W1
W901B
A OPERATION P.C.B.
BROWN
BLUE
T702
(Power
transformer)
W1
W3
CN602
D AC IN P.C.B.
CN601
CENTER/
SURROUND
SPEAKERS
AC IN

A



A Tuner/amplifier

① **Standby/on switch (⏻/I)**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.

② **Standby indicator (⏻)**
When the unit is connected to the AC mains supply, this indicator lights up in standby mode and goes out when the unit is turned on.

③ **Play timer/record timer button and indicator (◴PLAY/◴REC)**

④ **Clock/timer button (CLOCK/TIMER)**

⑤ **Demo button (▬ DEMO)**

⑥ **FM mode button (FM AUTO/MONO)**

⑦ **Source input button (INPUT SELECTOR)**

⑧ **Tuner/band button (TUNER/BAND)**

⑩ **Muting button and indicator (MUTING)**

⑪ **Volume control (VOLUME)**

⑫ **Headphone jack (PHONES)**

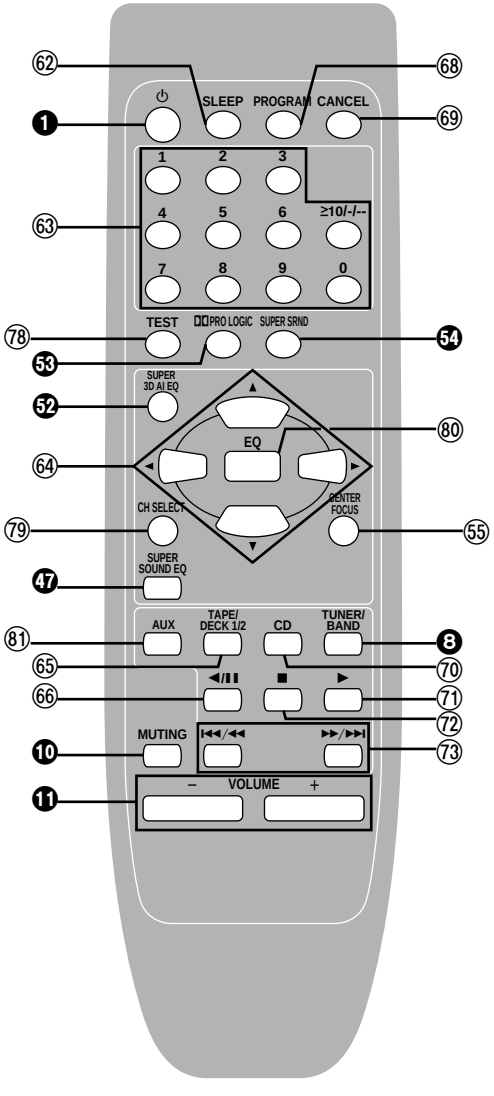
⑬ **Tuning mode button (TUNING MODE)**

⑭ **Set button (SET)**

⑮ **Tuning buttons (∨, ∧ TUNING)**

⑰ **RDS display mode button (RDS, PS–DISP MODE–PTY)**

B



B Remote control

Buttons such as ❶ function in the same way as the controls on the main unit.

⑫ **Sleep timer button (SLEEP)**

⑬ **Numbered buttons (1–9, 0, ≥10/-/--)**

⑭ **Cursor buttons (◀, ▶, ▲, ▼)**

⑮ **Tape select, deck 1/deck 2 select button (TAPE/DECK 1/2)**

⑯ **CD pause/tape reverse playback button (◀/❚❚)**

⑱ **Program button (PROGRAM)**

⑲ **Cancel button (CANCEL)**

⑳ **CD button (CD)**

㉑ **CD play/tape forward playback button (▶)**

㉒ **CD/tape stop button (■)**

㉓ **CD skip/search, tape fast forward/rewind buttons (I◀◀/◀◀, ▶▶/▶▶I)**

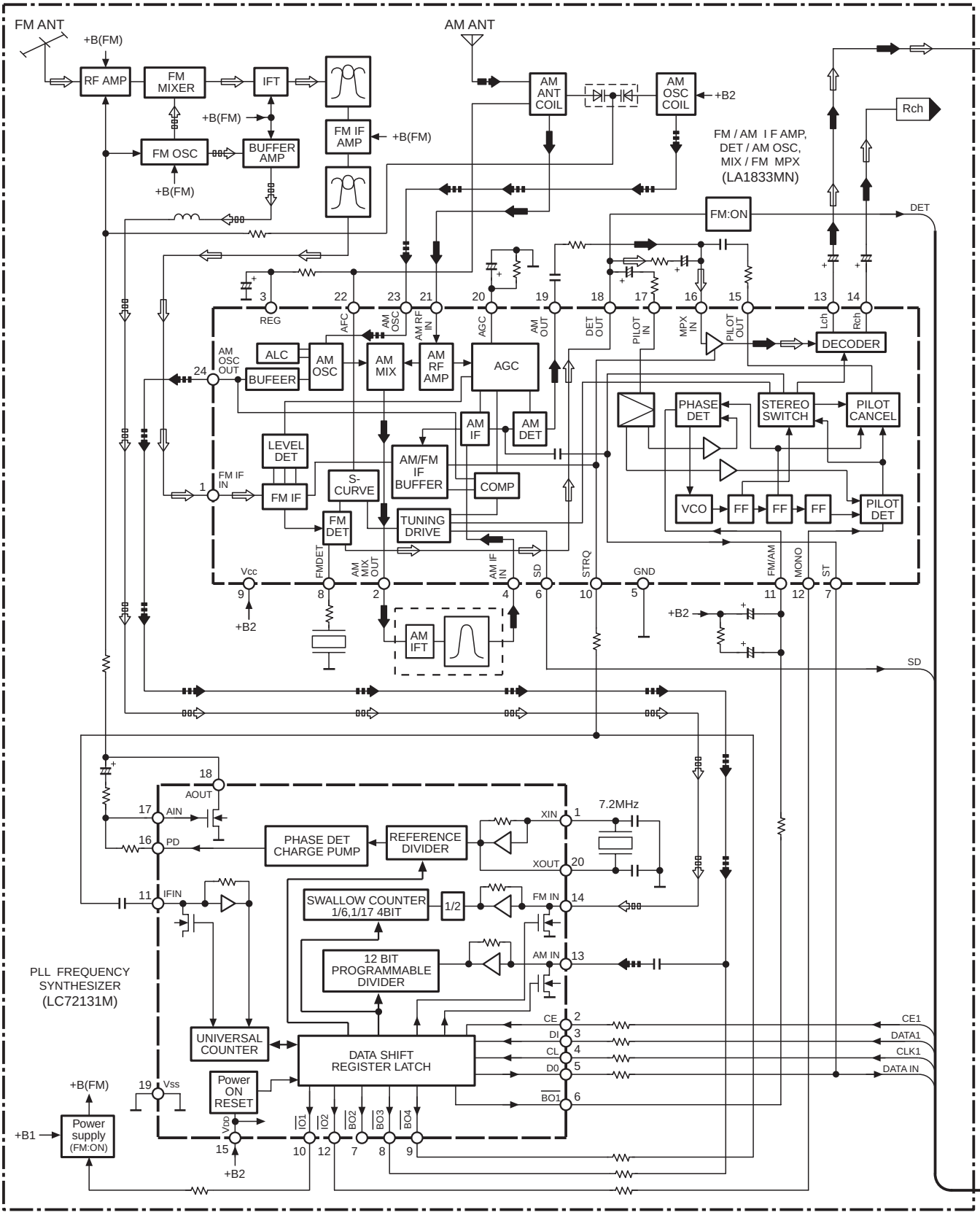
㉘ **Test button (TEST)**

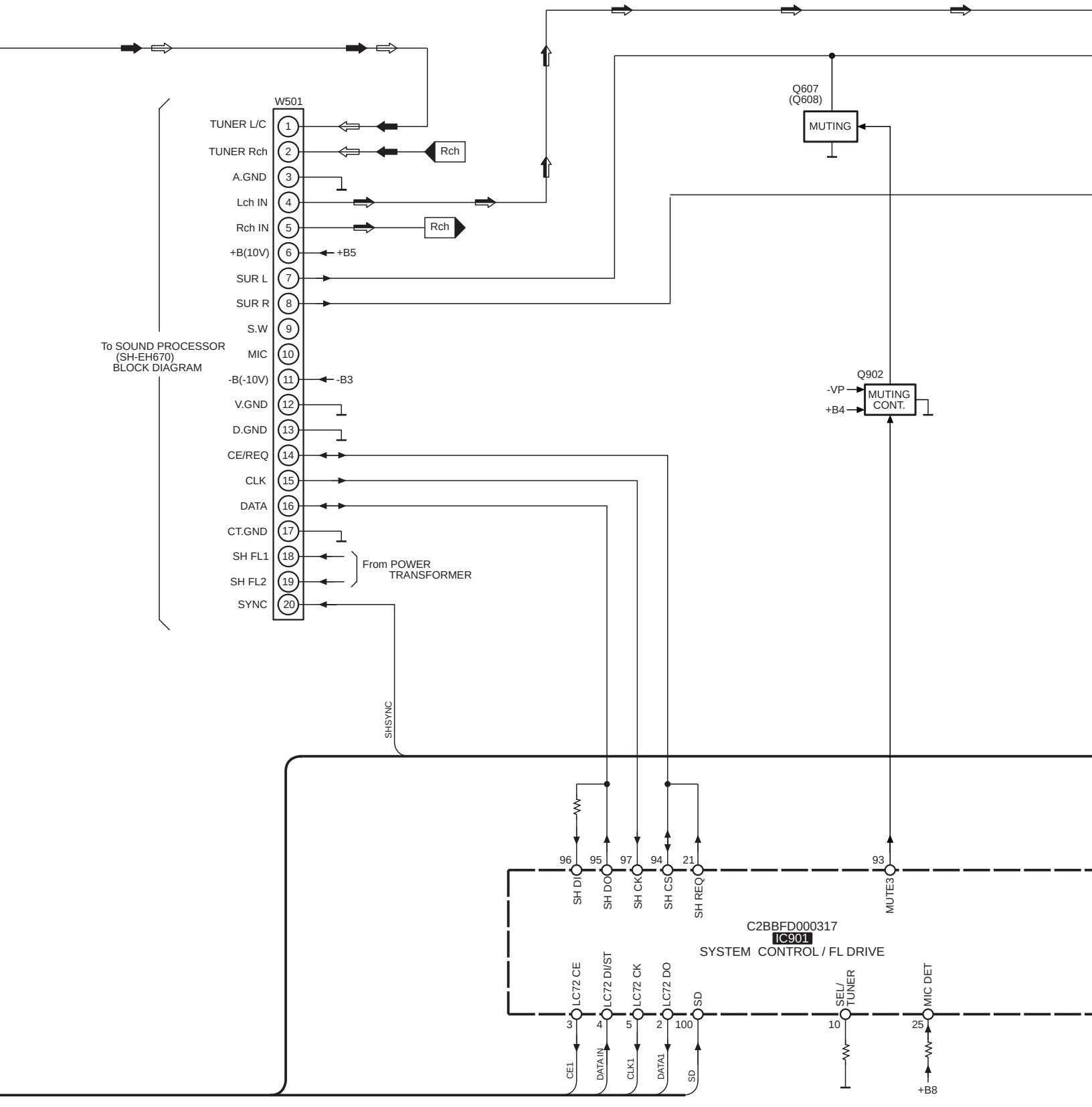
㉙ **Channel select button (CH SELECT)**

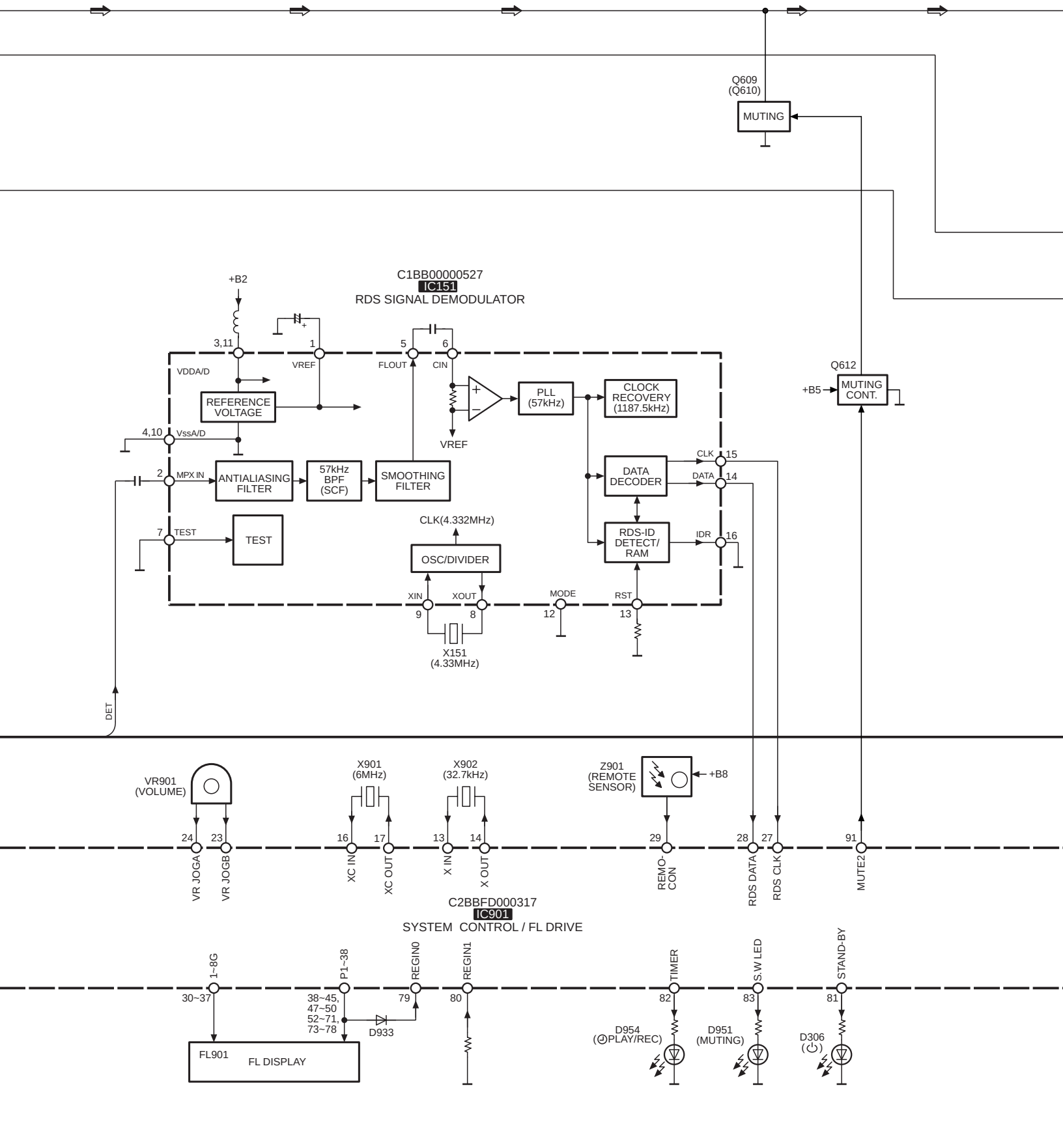
㉚ **EQ/AI EQ/Manual button (EQ/AI EQ/M.EQ)**

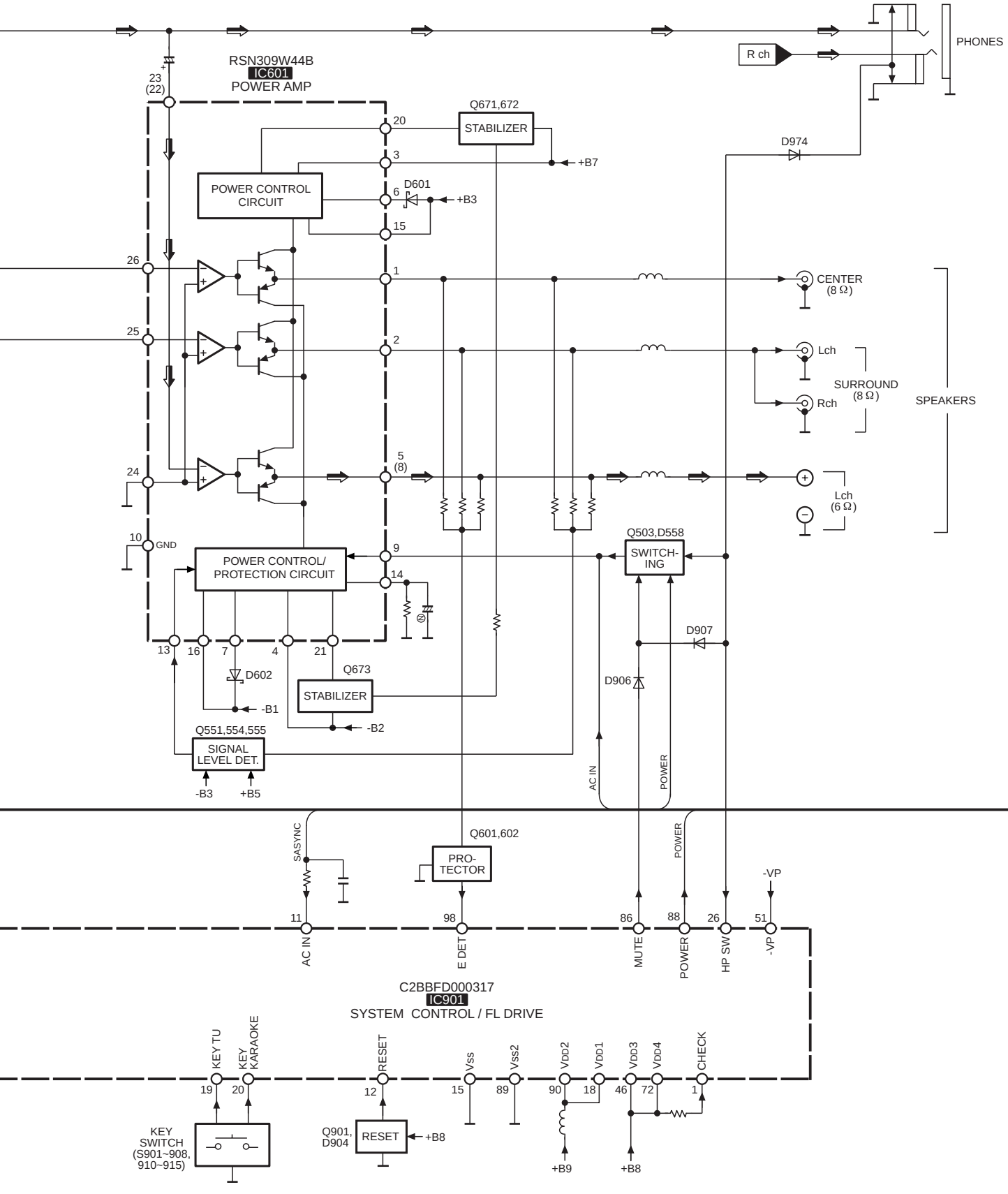
㉛ **AUX button (AUX)**

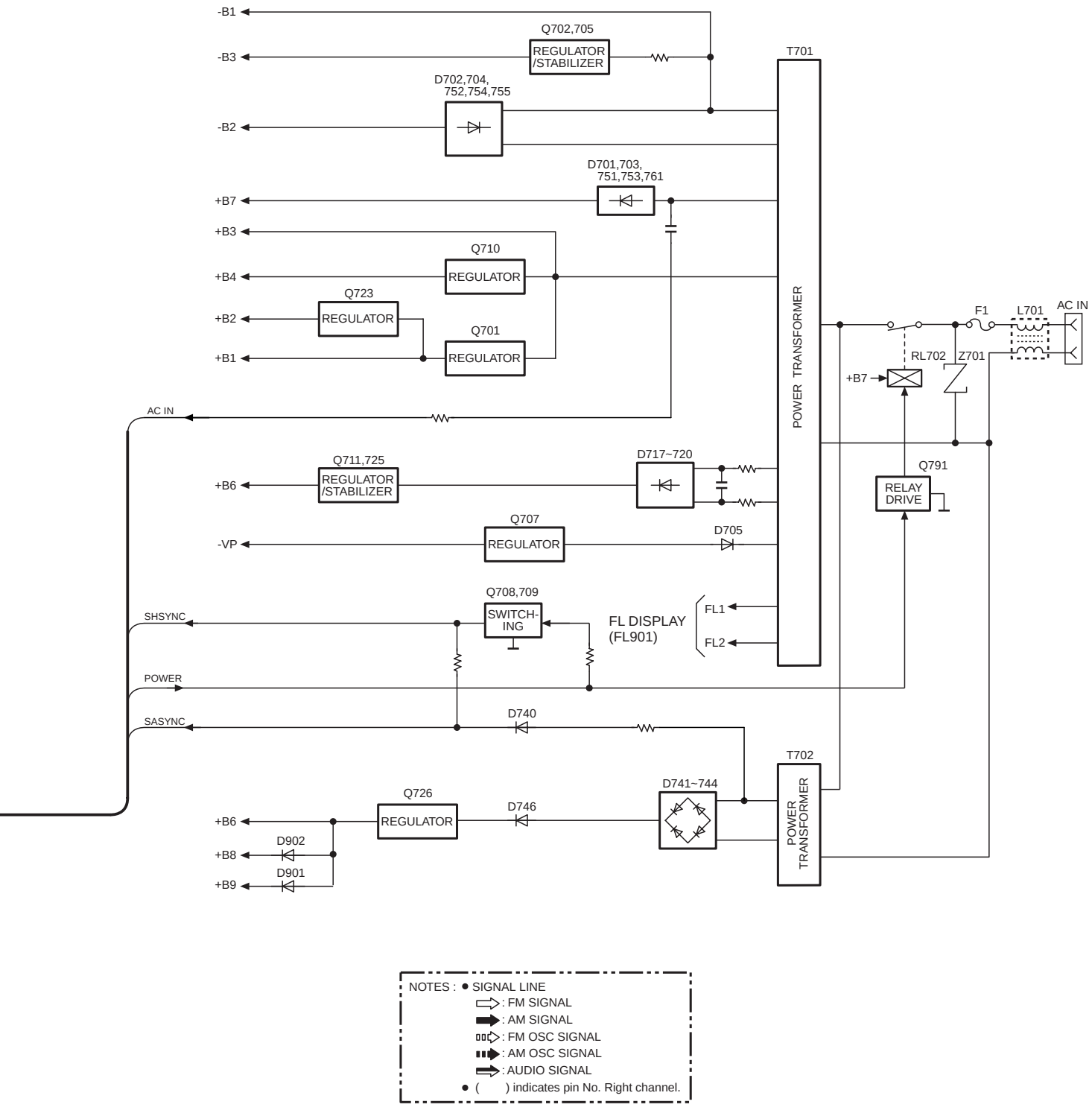
Z120 TUNER UNIT (RAN0005EM-2)



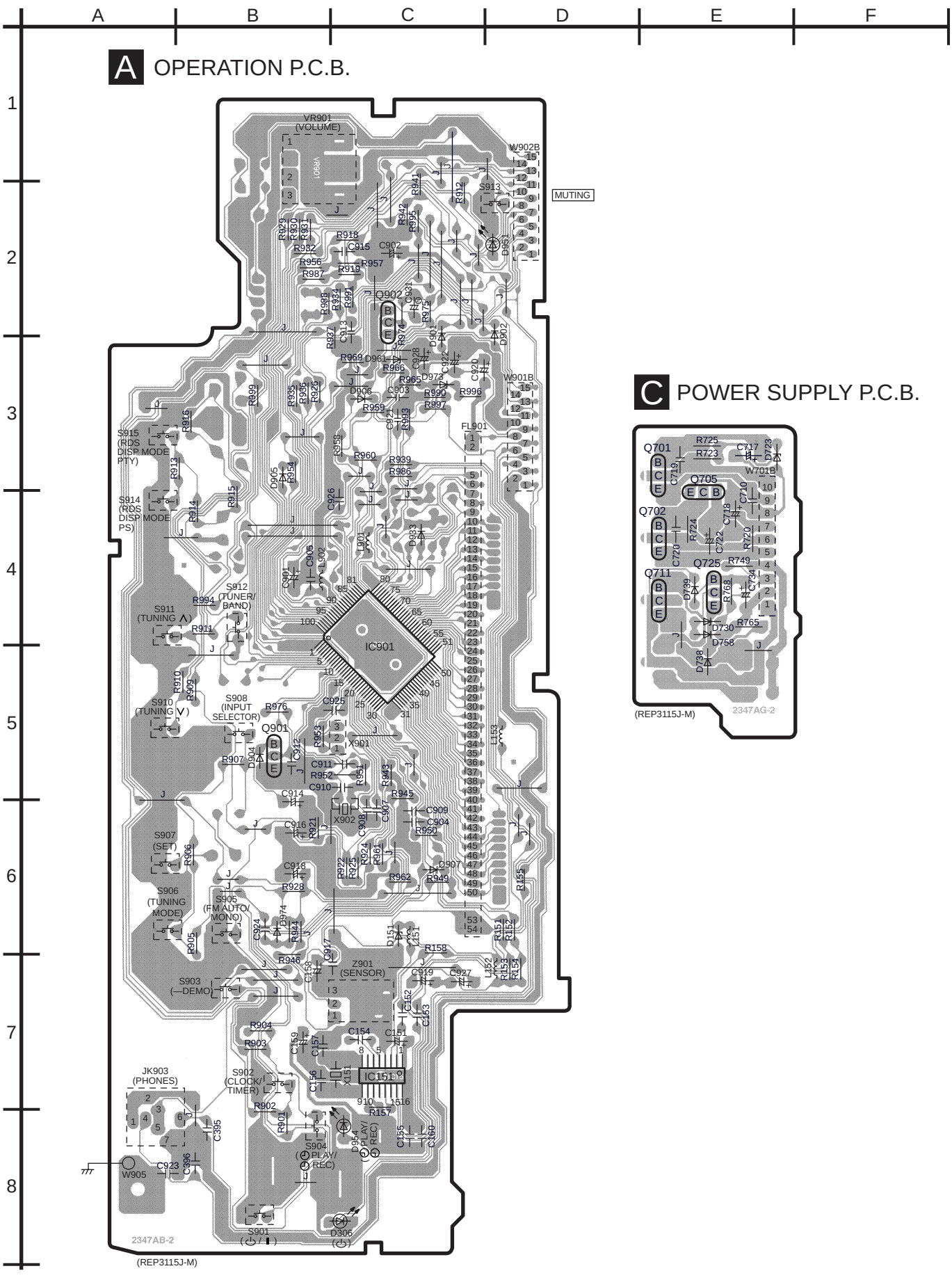

W501
TUNER L/C
TUNER Rch
A.GND
Lch IN
Rch IN
+B(10V)
SUR L
SUR R
S.W
MIC
-B(-10V)
V.GND
D.GND
CE/REQ
CLK
DATA
CT.GND
SH FL1
SH FL2
SYNC
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
Rch
Rch
+B5
-B3
From POWER TRANSFORMER
To SOUND PROCESSOR (SH-EH670) BLOCK DIAGRAM
Q607 (Q608)
MUTING
Q902
-VP
+B4
MUTING CONT.
SHSYNC
96
95
97
94
21
93
SH DI
SH DO
SH CK
SH CS
SH REQ
MUTE3
C2BBFD000317
IC901
SYSTEM CONTROL / FL DRIVE
LC72 CE
LC72 DI/ST
LC72 CK
LC72 DO
SD
SEL/ TUNER
MIC DET
3
4
5
2
100
10
25
CE1
DATA IN
CLK1
DATA1
SD
+B8


Q609
(Q610)
MUTING
C1BB00000527
IC151
RDS SIGNAL DEMODULATOR
+B2
3,11
1
5
6
VDDA/D
VREF
FLOUT
CIN
REFERENCE VOLTAGE
PLL (57kHz)
CLOCK RECOVERY (1187.5kHz)
4,10
VssA/D
VREF
2
MPX IN
ANTIALIASING FILTER
57kHz BPF (SCF)
SMOOTHING FILTER
DATA DECODER
CLK
15
DATA
14
7
TEST
TEST
CLK(4.332MHz)
RDS-ID DETECT/ RAM
IDR
16
OSC/DIVIDER
XIN
XOUT
MODE
RST
9
8
12
13
X151
(4.33MHz)
DET
Q612
+B5
MUTING CONT.
VR901
(VOLUME)
X901
(6MHz)
X902
(32.7kHz)
Z901
(REMOTE SENSOR)
+B8
24
23
16
17
13
14
29
28
27
91
VR JOGA
VR JOGB
XC IN
XC OUT
X IN
X OUT
REMO-CON
RDS DATA
RDS CLK
MUTE2
C2BBFD000317
IC901
SYSTEM CONTROL / FL DRIVE
1~8G
P1~38
REGIN0
REGIN1
TIMER
S.W LED
STAND-BY
30~37
38~45,
47~50,
52~71,
73~78
79
80
82
83
81
D933
FL901
FL DISPLAY
D954
(PLAY/REC)
D951
(MUTING)
D306


PHONES
R ch
RSN309W44B
IC601
POWER AMP
23
(22)
Q671,672
STABILIZER
20
3
+B7
D974
POWER CONTROL
CIRCUIT
6
D601
+B3
15
26
1
CENTER
(8 Ω)
25
2
Lch
Rch
SURROUND
(8 Ω)
SPEAKERS
24
5
(8)
Lch
(6 Ω)
10
GND
POWER CONTROL/
PROTECTION CIRCUIT
9
14
Q503,D558
SWITCH-
ING
D907
13
16
7
4
21
D602
Q673
STABILIZER
-B1
-B2
D906
Q551,554,555
SIGNAL
LEVEL DET.
-B3
+B5
AC IN
POWER
SASYNC
Q601,602
PRO-
TECTOR
-VP
11
98
86
88
26
51
AC IN
E DET
MUTE
POWER
HP SW
-VP
C2BBFD000317
IC901
SYSTEM CONTROL / FL DRIVE
KEY TU
KEY
KARAOKE
RESET
Vss
Vss2
VDD2
VDD1
VDD3
VDD4
CHECK
19
20
12
15
89
90
18
46
72
1
KEY
SWITCH
(S901~908,
910~915)
Q901,
D904
RESET
+B8
+B9
+B8



NOTES : ● SIGNAL LINE
: FM SIGNAL
: AM SIGNAL
: FM OSC SIGNAL
: AM OSC SIGNAL
: AUDIO SIGNAL
● ( ) indicates pin No. Right channel.


A
OPERATION P.C.B.
C
POWER SUPPLY P.C.B.
A
B
C
D
E
F
1
2
3
4
5
6
7
8
VR901
(VOLUME)
W902B
W901B
MUTING
IC901
IC151
Q901
Q902
FL901
Z901
(SENSOR)
S901
S902
(CLOCK/
TIMER)
S903
(—DEMO)
S904
(PLAY/
REC)
S905
(FM AUTO/
MONO)
S906
(TUNING
MODE)
S907
(SET)
S908
(INPUT
SELECTOR)
S910
(TUNING ∨)
S911
(TUNING ∧)
S912
(TUNER/
BAND)
S913
S914
(RDS
DISP MODE
PS)
S915
(RDS
DISP MODE
PTY)
JK903
(PHONES)
W905
D904
(PLAY/
REC)
D306
(⏻)
2347AB-2
(REP3115J-M)
Q701
Q705
Q702
Q725
Q711
W701B
2347AG-2
(REP3115J-M)